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GENERAL PLAN UPDATE



Environmental Impact Report



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City of Calistoga Volume III

Draft EIR: July 27, 1990
Certified Final EIR: October 16, 1990

GENERAL PLAN UPDATE
FINAL EIR

STATE CLEARINGHOUSE NUMBER:

90030423

PREPARED FOR:

CITY OF CALISTOGA
1232 WASHINGTON STREET
CALISTOGA, CALIFORNIA 94515

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PREPARED BY:

STA PLANNING, INC.
250 MONTGOMERY STREET, SUITE 1000
SAN FRANCISCO, CALIFORNIA 94104

NOVEMBER 15, 1990

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THE HISTORY OF THE

REPUBLIC OF THE UNITED STATES

OF AMERICA

BY
JAMES M. SMITH
OF THE
UNITED STATES

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I. NOTICE OF DETERMINATION

NOTICE OF DETERMINATION

TO: (X) Office of Planning and Research
1400 Tenth Street, Room 121, Sacramento, CA 95814

(X) Napa County Clerk
P.O. Box 298
Napa, CA 94559

SUBJECT: Filing of Notice of Determination in compliance with
Section 21108 or 21152 of the Public Resources Code.

Project Title: General Plan Update Environmental Impact Report

Project Location: City of Calistoga

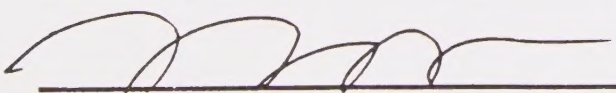
Project Description: Revision of City of Calistoga General Plan.

State Clearinghouse Number: 90030423

Contact Person: Jo Noble, Associate Planner
Telephone No.: (707) 942-5188

This is to advise that the City of Calistoga has approved the
above described project on October 16, 1990 and has made the
following determinations regarding the above described project:

1. The project X will, ___ not have a significant effect on
the environment.
2. X An environmental Impact Report was prepared for this
project pursuant to the provisions of CEQA.
3. Mitigation measures X were ___ were not made a condition
of the approval of the project.
4. A Statement of Overriding Considerations X was, ___ was
not adopted for this project.
5. Findings X were, ___ not made pursuant to the provisions
of CEQA.
6. The Final Environmental Document and the record of the
project approval may be examined at the Offices of the City of
Calistoga, 1232 Washington Street, Calistoga, CA 94515.



Richard D. Spitler, DATE: October 18, 1990
Acting Planning Director

DATE RECEIVED FOR FILING: _____

II. CITY COUNCIL RESOLUTIONS

RESOLUTION NO. 90-31

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CALISTOGA, COUNTY OF NAPA, STATE OF CALIFORNIA, CERTIFYING A FINAL ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE CITY OF CALISTOGA GENERAL PLAN UPDATE.

WHEREAS, the Planning Staff has filed with the State Clearinghouse, and the Calistoga City Council and Planning Commission a draft EIR for the City of Calistoga General Plan Update; and,

WHEREAS, the Planning Staff did send a copy of the Draft EIR to each agency having jurisdiction by law over the proposed project, advising these agencies to review and submit written comments, if any, to the City within the specified time period; and,

WHEREAS, following the required public notification all persons were given complete opportunity to be heard and to present written evidence related to the Draft EIR; and,

WHEREAS, the City has caused a Final EIR to be prepared; and,

WHEREAS, the Planning Commission considered the draft and final EIRs on September 12, 1990 and September 26, 1990 and recommended certification of the "FINAL EIR" (which includes both of those documents); the cover pages of which are attached hereto as Exhibit A, prior to taking action on the project.

NOW, THEREFORE, BE IT RESOLVED that the City Council hereby finds, determines and declares that the Final EIR for the City of Calistoga General Plan Update is complete and is in compliance with the requirements of the California Environmental Quality Act and its Guidelines, and that the City Council has reviewed and considered the information contained in the final document(s) prior to taking action and hereby certifies the "FINAL EIR".

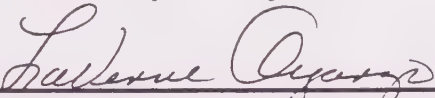
ADOPTED, SIGNED, AND APPROVED this sixteenth day of
October, 1990 by the following roll call vote:

AYES: Councilmembers Marberry, Beck and Mayor Pro-Tem Oyarzo

NOES: None


~~ABSENT:~~

ABSTAIN: Councilmembers Maxfield and Mayor Hughes



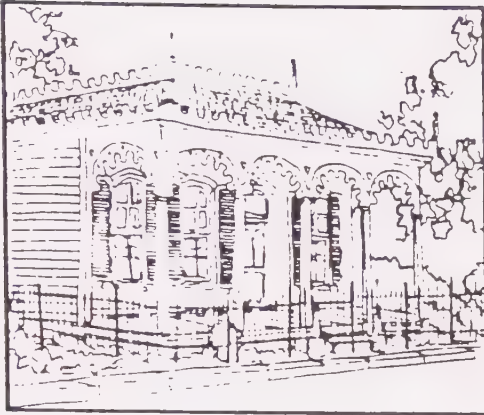
LAVERNE OYARZO, Mayor Pro-Tem
City of Calistoga

ATTEST:

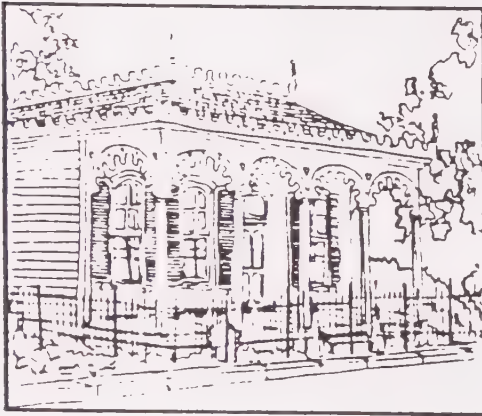


NATASHA MERKULOFF, City Clerk
City of Calistoga

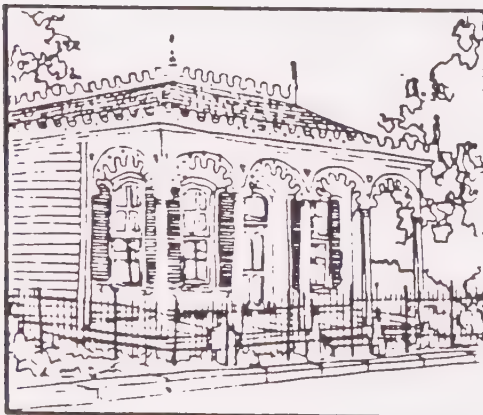
By: PATT OSBORNE, Deputy



GENERAL PLAN UPDATE



Environmental Impact Report



City of Calistoga
Volume III

Draft EIR: July 27, 1990
Certified Final EIR: October 16, 1990

**GENERAL PLAN UPDATE
FINAL EIR**

STATE CLEARINGHOUSE NUMBER:

90030423

PREPARED FOR:

**CITY OF CALISTOGA
1232 WASHINGTON STREET
CALISTOGA, CALIFORNIA 94515**

PREPARED BY:

**STA PLANNING, INC.
250 MONTGOMERY STREET, SUITE 1000
SAN FRANCISCO, CALIFORNIA 94104**

SEPTEMBER 26, 1990

RESOLUTION NO. 90-32

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CALISTOGA, COUNTY OF NAPA, STATE OF CALIFORNIA, MAKING CERTAIN FINDINGS AND ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS REQUIRED BY THE CALIFORNIA ENVIRONMENTAL QUALITY ACT PERTAINING TO THE CITY OF CALISTOGA GENERAL PLAN UPDATE FOR WHICH AN ENVIRONMENTAL IMPACT REPORT (EIR) HAS BEEN PREPARED.

WHEREAS, the City Council of the City of Calistoga intends to consider adoption of a General Plan Update for the City of Calistoga; and

WHEREAS, the California Environmental Quality Act of 1970 (CEQA), as amended, requires that, when approving a project for which an Environmental Impact Report (EIR) has been prepared, the decision-making body shall review the EIR and make specific findings regarding the significant effects on the environment identified in said EIR; and

WHEREAS, the City Council of the City of Calistoga is the decision-making body for the General Plan Update; and

WHEREAS, the City of Calistoga Planning Commission conducted four public workshops, three public study sessions, and one public hearing during the year 1990 regarding the General Plan Update; and

WHEREAS, the City Council of the City of Calistoga conducted three public workshops and one public hearing during the year 1990 regarding the General Plan update; and

WHEREAS, the draft Environmental Impact Report for the City of Calistoga General Plan Update was made available to the general public and the state clearinghouse for review in the manner required by CEQA; and

WHEREAS, a Notice of Completion for the General Plan Update was filed with the State of California Office of Planning and Research; and

WHEREAS, the "FINAL EIR" was certified as complete by the City Council and said body also reviewed and considered the "FINAL EIR" prior to acting upon or approving subject project; and

WHEREAS, the following findings of fact with respect to the significant effects on the environment are based on the evidence in the record compiled in the course of reviewing the General Plan Update. The sources of evidence include the General Plan Update: Volume I, MEA and Issues and Options; Volume II, Policy and Program Document; Volume III, Environmental Impact Report III (which includes the draft EIR and "FINAL EIR"), and all appendices and attachments, all staff reports and memoranda prepared on the project, all correspondence and public testimony received on the project, and comments made by City Staff, Planning Commission, and City Council during hearings on the project, as recorded in the minutes of those hearings.

NOW, THEREFORE, BE IT RESOLVED that the City Council makes the following findings with respect to the significant effects on the environment of the General Plan Update as identified in the heretofore mentioned "CERTIFIED EIR":

LAND USE

A. Impact: Incompatibility of adjacent commercial and residential land use.

Finding: Mitigated to a level of Insignificance based on the following:

MITIGATION MEASURES

1. The City shall amend the Zoning Code to ensure that proposed commercial development abutting residential uses provides for ample building setbacks and buffering.
2. The City shall amend the Zoning Code to require multi-family structures located adjacent to single-family parcels to incorporate adequate screening into project design to prevent view intrusion.
3. The City shall amend the Zoning Code to avoid incompatible building heights.
4. The City shall prioritize development on infill parcels with existing public services and utilities.
5. The City shall discourage General Plan Amendments that affect the balance of land uses such as uses which would create a jobs/housing imbalance.
6. The City shall amend the Zoning Code to protect the integrity of residential neighborhoods by restricting non-residential uses.

7. The City shall petition LAFCO to expand its Sphere of Influence to include the Study Area.
8. The City shall ensure that the Zoning Code prohibits tourist-based business outside the downtown area.
9. The City shall locate neighborhood commercial within easy access to future residential developments.
10. The City shall amend its Zoning and Subdivision Codes to allow for adequate landscaping in non-residential areas.
11. The City shall prepare an urban design study to coordinate the development of pedestrian amenities and the character of the downtown area. The study will include:
 - Parking design and location
 - Street tree theme
 - Lighting
 - Street furniture
 - Building scale, bulk, and facade treatment
 - Sign regulations
 - Landscape standards
12. The City shall designate sufficient land only to increase visitor accommodations in order to encourage visitors to stay overnight.

B. Impact: The General Plan will have an impact on the Zoning Code.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Refer to Land Use Mitigation Measures A. 1, 2, 3, 6 and 10 contained herein.

C. Impact: Implementation of the General Plan will have an impact on the Resources Management System of the City of Calistoga.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Through a revised Resource Management System Ordinance the City shall monitor new development to ensure the adequate provision of water and wastewater services.

D. Impact: Implementation of the General Plan may create land use impacts by initiating or expanding upon plans and programs that relate to land use, including an Urban Design Study, Construction of Public Facilities, Hillside Management Ordinance, and designation of a scenic highway corridor.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Through its corporate powers the City shall provide for the construction of the following facilities:

- a new police facility
- an additional fire substation on the west side of Calistoga
- an upgraded and expanded library
- a public swimming pool for school and recreation
- a senior citizen center
- new school sites as population levels warrant
- a youth recreation center.

2. The City shall ensure that new development is phased concurrently with planned infrastructure expansions.

3. The City shall retain areas for visual amenities through development controls to protect the ridgeline and provide for site and design review of all development proposals.

4. Through site and design review, the City shall ensure that proposed development shall not be visible from the valley floor. The appearance of rows of houses along the skyline shall be avoided.

5. The City shall prepare a hillside management ordinance that will address:

- development location
- grading
- revegetation and landscaping
- light and glare

6. Through the environmental review process, the City shall analyze areas of ecological sensitivity in relation to proposed development.

7. The City shall prepare an Urban Design Plan for selected entrances to the City and the downtown core area.

8. The City, in conjunction with the County of Napa, shall obtain official designation of Highways 29 and 128, and the Silverado Trail as Official State Scenic Highways.

9. Using citizen input, the City shall develop guidelines for each proposed scenic route corridor as required by the state, including guidelines for land use, site planning, outdoor advertising, landscaping, earth moving, and design.

10. The City shall develop Zoning Code provisions to require that new development at the major entrances to the City be aesthetically pleasing in design, provide buffering between land uses, and retain open space and unique land features.

11. The City shall establish a scenic highway overlay in the Zoning Code to ensure development retains scenic vistas along Silverado Trail, Petrified Forest Road, Highway 128 between the western City Limits and Petrified Forest Road, and Lake County Highway.

12. The City shall cooperate with the operators of the Napa Valley Wine Train to extend the service to Calistoga subsequent to environmental analysis.

13. Through the environmental review process, the City shall analyze County-proposed developments for compatibility with adjacent City uses.

HOUSING

A. Impact: Existing infrastructure constraints may impact the City's ability to meet its fair share housing allocations for 1990-1995.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Through corporate and police powers the City shall make every effort to meet its fair share of housing as determined by Association of Bay Area Governments (ABAG).

2. The City shall make use of governmental programs related to construction and rehabilitation needs of low and moderate income households. The City shall apply for and/or make applications available to the public. Funding sources includes, but are not limited to:

FEDERAL (FmHA)

- FmHA Section 502 - Rural Housing Home Improvement Loan Program. Provides loans to low income households to buy, build, improve, repair, or rehabilitate owner occupied rural homes.
- Section 504 - Rural Housing Repairs Program. Provides loans and grants to very low income persons to make repairs necessary for health and safety.
- Section 523 - Self-Help Housing. Provides grants and loans to fund technical assistance to groups building units financed under 502.
- Section 523/524 - Rural Housing Sites Loan Program. Provides direct loans to private or public non-profit organizations to acquire and develop land in rural areas.

STATE

- California Self Help Housing Program. Through grants and loans to local governments and non-profit organizations, this program helps low and moderate income families construct or rehabilitate their homes.
- Pre-development Loan Program. Low interest loans to local governments and non-profit organizations for pre-development activities.
- Nonprofit Housing Program. The California Housing Finance Agency (CHFA) provides permanent financing for contractor-built single-family homes developed by nonprofit organizations which serve lower income families.
- Minority and Small Business Development. CHFA assists minority-owned and women-owned developers.

LOCAL

- Inclusionary Housing Program. All new residential units - five or more are required to address affordable housing through providing 10% of the units as affordable to very low, low, and moderate income households, land dedication, in-lieu fee, or reasonable alternative method.

- Make use of repayment funds from C.D.B.G. Rehabilitation board to facilitate retention, repair, and development of affordable housing units.
- 3. The City shall ensure that all rental property owners allow the use of Section 8 rental assistance certificates.
- 4. The City shall amend the Zoning Code to grant residential density use bonuses for very low and/or low income in order to comply with Government Code Sections 65913.4, 65915, and 65917.
- 5. The City shall continue to implement the provisions of the Second Dwelling Units Chapter (17.37) of the City' Zoning Code.
- 6. The City shall keep a list of all available and appropriate federal, state, and local funding sources that support rental housing units. The City shall apply and/or provide applications to the following programs:

FEDERAL (FmHA)

- Section 515 - Rural Rental Housing Program. Provides loans to construct and rehabilitate rental and cooperative housing for low and moderate income families and elderly persons.

STATE

- Rental Housing Construction Program. Provides loans to local governments for the development of rental housing.

LOCAL

- Inclusionary Housing Program. All new residential units - five or more are required to address affordable housing through providing 10% of the units as affordable to very low and low income households, land dedication, in-lieu fee, or reasonable alternative method.
- 7. The City shall encourage mixed-use development through its Zoning Ordinance.
- 8. The City shall establish a housing impact fee for new businesses to help house employees for low-salaried positions.

9. The City shall keep a list of all available state and regional programs that support housing for special need groups. The City shall apply and/or provide applications to the public. The City shall work with HCD and apply for the following programs:
- Emergency Shelter Program - Awards grants to local governments and non-profit organizations for actively aiding the homeless.
 - Senior Citizens Shared Housing Program - Provides grants to local governments and non-profit organizations helping seniors find others with whom they can share housing.
 - Office of Migrant Services - Awards grants to local governments for administration, management, operation, and rehabilitation of rental housing units for migrant families.
 - Farm Labor Housing Rehabilitation Loan Program. Provides Section 8 certificates to developmentally, mentally, and physically disabled adults. The Napa Valley Housing Authority distributes Section 8 rental certificates.
10. The City, alone or in conjunction with the County, shall investigate California Debt Limit Allocation Committee requirements for issuance of tax-exempt Mortgage Revenue Bonds (MRBs). If feasible, the City and/or County shall apply to the Committee for allocation of MRBs.
11. The City shall provide information to developers and the public regarding the California Housing Finance Agency's (CHFA) bond financing program.
12. The City, along or in conjunction with the County, shall contact the California Debt Advisory Commission and investigate requirements to obtain authority for the issuance of Mortgage Credit Certificates (MCCs). The City and/or County shall work with local and real estate agencies and lenders to implement a MCC program.
13. The City shall rezone a significant amount of land designated by the Zoning Code for Transitional uses to residential uses. Through the Zoning Code, the City shall allow limited residential units in commercial districts provided it can be done in a compatible manner.

14. The City shall consider rezoning lands designated for commercial and industrial uses with mixed uses in order to accommodate projected housing needs.
15. In accordance with Section 65852.3 and 65852.4 of the Government Code, the City shall revise its Zoning Code to allow manufactured homes in single-family zones.
16. In accordance with Sections 65852.7 of the Government Code, the City shall amend its Zoning Code to provide for the possibility of emergency and transitional shelters, should the need occur. Potential sites are shown on the Adequate Sites Map included in the EIR.
17. The City shall maintain a list that provides information on approved and proposed projects, especially projects which include rental housing. This list shall be made available to the public.
18. The City shall designate a housing coordinator to work with the Planning Department and/or with the City Administrator. Responsibilities of the housing coordinator shall include, but are not limited to, developing a pilot program to package housing incentives and funding sources aimed at developing affordable housing, farmworker housing, emergency shelters, and other types of housing. The coordinator shall also make recommendations for use of the City's CDBG repayment funds to the City Council.
19. The City shall review its Capital Improvement Program annually to ensure that sewer/water/street improvements facilitate timely residential development.
20. The City shall review previous redevelopment studies and consider encouraging the formation of a special assessment district in the "lower Washington" area. Funds from the assessment could fund long-term rehabilitation and property upgrading programs for existing properties and structures.

OR

The City shall reinitiate efforts to prepare and implement a redevelopment plan for the "lower Washington area" of Calistoga, if feasible. The plan will consider replacing older multi-family units with new multi-family units for very low to low income households.

21. The City shall make use of governmental programs listed in Implementing Program 3 under Goal A of the Housing Element. In addition, the City shall apply for and/or provide applications for the following programs:

FEDERAL

- 533 - Rural Preservation Grant Program. Funds non-profit organizations to rehabilitate older rural homes for very low and low income families.

STATE

- Special User Housing Rehabilitation Program. Offers loans for rehabilitating residential hotels and other housing occupied by the elderly, disabled, and low income persons.
 - Deferred Payment Rehabilitation Loan Program. Provides loans to local governments to assist with the rehabilitation of housing for low and moderate income households.
22. The City shall annually update its Capital Improvements Plan to ensure municipal systems are in good repair.
23. The City shall continue to enforce the provisions of the City Municipal Code and resolutions in order to maintain existing mobilehome parks.
24. The City shall amend the Zoning Code to be consistent with the General Plan Land Use Plan (diagram).
25. The City shall review all loan agreements for housing assistance to ensure clauses are included which require unit owners to retain the families that occupied the units prior to rehabilitation, unless adequate cause can be shown.
26. The City shall amend their Zoning Code to regulate the placement of Bed and Breakfast establishments in residential neighborhoods. The amendment shall regulate minimum spacing and location next to local streets to prevent the proliferation of nonresidential uses in residential neighborhoods.
27. The City shall enact an ordinance requiring loan recipients to give one-year advance notice to the City of potential conversions to market rate units.

28. Through its Inclusionary Housing Program, the City shall assist non-profit housing corporations in purchasing subsidy termination units.
29. The City shall amend its Subdivision Ordinance and Zoning Ordinance to comply with the State Subdivision Map Act.
30. The City shall implement a fast-track application procedure for projects that include residential development, especially projects that include affordable housing.
31. The City shall continue to reduce, waive, or allow deferred payments Resource Management System fees for second units, senior housing, and very low to low income housing projects.
32. The City shall promote higher density and infill development.

B. Impact: Implementation of the General Plan may impact the availability of dwelling units for future employees, creating a project-specific and cumulative jobs/housing imbalance.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Refer to Housing Mitigation Measures A. 1 through 32 contained herein.

C. Impact: Implementation of the General Plan may impact the availability of affordable housing for low and moderate income households, affecting in particular, special needs groups such as the elderly, farmworkers, the handicapped, large families, and single-parent households.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Refer to Housing Mitigation Measures A. 1 through 32 contained herein.

TRAFFIC AND CIRCULATION

A. Impact: Implementation of the General Plan will impact traffic volume and levels of service.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. The City shall develop their circulation system according to the Circulation Plan and diagrams.
2. Through the Capital Improvements Plan and related impact fees, the City shall ensure that adequate funds are provided to upgrade and maintain the existing circulation network.
- 3 The City, in conjunction with other municipalities, shall discuss possibilities of providing transportation services to citizens of Calistoga and the rest of the Napa Valley, including the possibility of utilizing designated cars on the Napa Valley Wine Train, a regional public bus system, or other forms of regional transportation.
4. Through the environmental review process, the City shall require proposed developments to include appropriate site planning techniques which minimize traffic impacts, and to provide necessary street improvements.
5. The City shall improve directional signing systems to help guide visitors to their destinations.

B. Impact: Implementation of the General Plan will impact bicycle and pedestrian facilities.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. The City shall require repair and/or construction of sidewalks on all residential, collector and arterial streets.
2. The City shall prepare an urban design study to coordinate the development of pedestrian amenities and the character of the downtown area. The study will include:
 - parking design and location; street tree theme, lighting, street furniture, building scale, bulk, and facade treatment, sign regulations, landscape standards.

C. Impact: Implementation of the proposed project will impact the current parking shortfall by increasing parking demand.

Finding: Significant impacts have been partially mitigated by the following:

MITIGATION MEASURES

1. The City shall develop a benefit assessment district or a similar mechanism to assist in the funding of parking lot construction to meet local and tourist demands.
2. The City shall review parking facilities as part of the design review process for new or expanded development projects.
3. Refer to Traffic and Circulation Mitigation Measures B. 1 and 2 contained herein.

D. Impact: Implementation of the General Plan, in conjunction with other past, present, and reasonably foreseeable/future projects will have a cumulative impact on regional traffic and circulation.

Finding: Significant impact can be partially mitigated based on the following:

MITIGATION MEASURES

1. Refer to Traffic and Circulation Mitigation Measures A. 1 through 5, B. 1 and 2 and C. 1 and 2.

AIR QUALITY

A. Impact: Project construction activities will temporarily impact air quality.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. The City shall review all development proposals for short-term and long-term impacts to air quality.
- B. Impact: Implementation of the General Plan will have a long-term impact on pollutant emissions.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. The City shall implement improvements recommended in

the MEA and in the Circulation Element of the General Plan. Special attention shall be given to improvements related to pedestrian and bicycle usage.

2. The City shall review all development proposals for short-term and long-term impacts to air quality.

C. Impact: Implementation of the General Plan, in conjunction with other General Plans within the Bay Area Air Quality Management District, will have a cumulative impact on air quality in the region.

Finding: Significant impact can be partially mitigated based on the following:

MITIGATION MEASURES

1. Refer to Air Quality Mitigation Measures B. 1 and 2 contained herein.

2. The City shall support the Bay Area Quality Management District, and implement reasonable and feasible new regulations related to the improvements of air quality.

NOISE

A. Impact: Implementation of the General Plan, in conjunction with past, present, and reasonably foreseeable future projects, will have an incremental insignificant impact.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. The City shall develop a comprehensive noise ordinance incorporating the provisions contained in the Technical Supplement to the Noise Element of the City of Calistoga General Plan prepared by Sound Solutions on October 23, 1989.

2. The provisions of the Noise Element and accompanying Technical Supplement shall be incorporated into the City Zoning Code.

3. The City Planning Department shall evaluate all proposed projects for noise exposure in accordance with the flow chart in Figure 4 in the Technical Supplement to the Noise Element of the City of Calistoga General Plan prepared by Sound Solutions on October 23, 1989.

4. The City Planning Department shall evaluate all proposed projects involving noise sources for noise production in accordance with the flow chart in Figure 5 in the Technical Supplement to the Noise Element of the City of Calistoga General Plan prepared by Sound Solutions on October 23, 1989.

5. The City Building Department shall develop procedures to check compliance of proposed buildings with the California State Noise Insulation Standards and noise-related provisions of the Uniform Building Code. Procedures shall also be implemented to check for consistency between building plans and any specifications for noise mitigation measures given in required noise studies.

6. The City Planning Department shall require post-project monitoring of noise levels when appropriate to determine whether the completed project is in compliance with Noise Element standards.

7. The City shall review and comment on documents of a regional nature that pertain to noise.

8. The City shall implement all recommended improvements related to bicycle and pedestrian paths as stated in the Circulation Element.

B. Impact: Future project developments will result in significant roadway impacts on Silverado Trail, Washington Street, Lake Street, and Berry Street.

Finding: Significant impact can be partially mitigated based on the following:

MITIGATION MEASURES

1. Refer to Noise Mitigation Measures A. 1, 6 and 8 contained herein.

C. Impact: Noise impacts as a result of sprint car races at the Napa County Fairgrounds are expected to result in significant impacts.

Finding: Significant impact can be partially mitigated based on the following:

MITIGATION MEASURES

1. Refer to Noise Mitigation Measures A. 1 and 2 contained herein.

BIOLOGICAL RESOURCES

A. Impact: Implementation of the General Plan will not significantly impact the Calistoga Popcorn Flower or Napa Bluegrass.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Through the environmental review process, the City shall require a study of native habitats and biological resources where appropriate by a qualified biologist prior to development.

B. Impact: Development according to proposed land use designations may impact native and riparian vegetation.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Due to the presence of endangered species, the City shall require all work associated with wetlands to complete botanical surveys and obtain environmental; review prior to any modifications.
2. The City shall ensure that all waterways are managed as coherent ecological systems. All undeveloped waterways shall be buffered to prevent development and encroachment as follows:
 - a. For minor tributaries, a minimum of 30 foot setbacks shall be required from the top of the high bank.
 - b. For the Napa River, a minimum setback of 30 feet from the top of the high bank shall be limited to access for maintenance, erosion control, and pedestrian/bicycle pathways.
 - c. Within setback zones, cross fences shall not be allowed, and the zones shall not be used for alternative purposes including, livestock grazing, lawn clippings or trash disposal.
 - d. The City shall prepare a study analyzing the feasibility of placing riparian vegetation corridors

and linear parks in wetland sinks located along water courses, geothermal marshes and seasonal creeks in the City.

3. The City shall prepare an amendment to the Tree Preservation Ordinance specifically addressing the City's oak and historic trees.

4. Through the environmental review process, the City shall require a study of native habitats and biological resources where appropriate by a qualified biologist prior to development.

5. The City shall protect watercourses and watersheds as follows:

a. Development proposed in erosion-prone areas shall be required to include a soils and hydrological analysis for environmental review.

b. The City shall review all County policies and development proposals in watersheds. The City shall encourage the County through the environmental review process to protect watersheds.

c. The City shall investigate methods to improve water quality to enhance fisheries and public use.

d. The City shall seek Urban Stream Restoration grant funds to help bank stability and improve water quality.

6. The City shall encourage Mt. Washington and Mt. Lincoln, Oat Hill Trail Road, and other recreational areas for low intensive uses such as: bicycle and hiking trails, educational signage, benches and fencing in accordance with the Land Use Elements.

7. The City shall ensure that all waterways are buffered to prevent development and reserve the Open Space associated with rivers and streams in Calistoga.

8. In conjunction with site review or use permit approval, the City shall require detailed grading and landscaping plan for new developments. The plan shall be reviewed by the Planning Development for its treatment of hillsides, forest lands, sensitive areas, viewsheds, and other aesthetic features.

9. The City shall prepare hillside design guidelines and zoning controls to protect slope stability, minimize soil erosion, preserve natural vegetation and scenic vistas.

C. Impact: Destruction of any riparian or woodland habitats will significantly impact wildlife species.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Refer to Biological Resources Mitigation Measures B. 1 through 9 contained herein.

D. Impact: Destruction of habitats along waterways will potentially impact the peregrine falcon and prairie falcon, both of which are listed as "endangered" by the state and/or federal agencies.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Refer to Biological Resources Mitigation Measures B. 1, 2, 4, 5 and 7 contained herein.

E. Impact: Buildout of the proposed project, in conjunction with past, present, and reasonably foreseeable development, will have a cumulative impact on native vegetation, wildlife, and threatened and endangered species.

Finding: Significant impact can be partially mitigated based on the following:

MITIGATION MEASURES

1. Refer to Biological Resources Mitigation Measures B. 1 through 9 contained herein.

PUBLIC SERVICES AND UTILITIES

A. Impact: Implementation of the General Plan will impact the ability of fire service staff and facilities to met demand on fire protection.

Finding: Mitigated to a level of insignificance.

MITIGATION MEASURES

1. Through its corporate powers the City shall provide for the construction of the following facilities:

- a new police facility

- an additional fire substation on the west side of Calistoga
- an upgraded and expanded library
- a public swimming pool for school and recreation
- a senior citizen center
- new school sites as population levels warrant
- a youth recreation center
- City administrative services

2. The City shall provide adequate levels of staffing for all new facilities.

3. The City Fire Department shall ensure that existing and new development in fire hazard areas provide adequate clearance around structures.

4. The City shall investigate methods to improve fire apparatus access on existing streets and driveways.

5. The City shall annually update its Capital Improvements Plan to ensure that municipal systems are in good repair.

6. The City shall consider the adoption of Policies and Requirements to ensure adequate staffing levels for public services.

B. Impact: Implementation of the General Plan will impact the ability of the police staff and facilities to meet demands for police protection.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Refer to Public Services and Utilities Mitigation Measures A. 1, 2, 5 and 6 contained herein.

C. Impact: Implementation of the General Plan will impact the supply of water for the City.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. The City shall prioritize development on infill parcels with existing public services and utilities.

2. Through a revised Resource Management System Ordinance the City shall monitor new development to ensure the

adequate provision of water and wastewater services.

3. The City shall provide adequate levels of staffing for all new facilities.

4. The City shall ensure that new development is phased concurrently with planned infrastructure expansions.

5. Through the Resource Management System and environmental review process, the City shall coordinate public utility provision with land development.

6. The Public Works Department shall prepare a water enhancement plan. The following sources of water, among others, will be investigated:

a. NBA Contract Negotiation - Open discussions with the Napa County Conservation District and City of Napa regarding increase in NBA allocations or direct long term purchase of additional water.

b. Fiege Canyon Well Field - Investigate increasing production of existing wells and the potential for developing additional wells.

c. Flynnville wells - Open discussion with existing owners for testing and possible access or acquisition potential.

d. Pacheteau Wellsite (Flynnville) - A fresh water well was developed by the E.M.L. Corporation as part of a proposal to develop the Pacheteau resort area.

e. Solari Wellsite - Open discussions with existing owners for testing and possible access or acquisition potential.

f. Dredging of reservoir - Evaluate existing information and update engineered estimates and feasibility.

g. Raise dam - evaluate existing information and update engineered estimates and feasibility.

7. The City shall use its corporate powers to collect funds for water, wastewater and stormwater expansion and repair. Proposed system improvements will be included within the Capital Improvements Plan.

8. The City shall provide educational information on water conservation to Calistoga citizens and business.

9. The City shall review all Use Permits and other discretionary permits for any excessive water use above quotas.

10. The City shall prepare a water rationing plan to be used in case acute water shortages occur.

11. The City shall adopt land use regulations which limit the ability of large residential, commercial and industrial land uses to use the cold water aquifer for uses other than landscaping purposes.

12. The City shall require new land uses to hook up to the City water supply if located nearby infrastructure. The City shall not allow the use of groundwater as the primary source of water.

13. The City shall survey all existing wells in Calistoga for compliance with the City's Backflow PRevention Program.

14. The City shall annually update its Capital Improvements Plan to ensure that municipal systems are in good repair.

D. Impact: Implementation of the General Plan will impact the level of service and infrastructure for wastewater services.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Refer to Public Services and Utilities Mitigation Measures C. 1, 2, 4, 5, and 7 contained herein.

2. The City and the Regional Water Quality Control Board shall monitor commercial and industrial effluent and issue warnings or consider fines for excessive water degradation.

3. The City shall investigate and secure tenure on effluent spray irrigation sites including, but not limited to, the following:

- Fox Property
- Airport
- Fredianni Storage Ponds (10 MG)

4. The City shall annually update its Capital Improvements Plan to ensure that municipal systems are in good repair.

E. Impact: Implementation of the General Plan will impact the City's storm drain system.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Refer to Public Services and Utilities Mitigation Measures C. 7 through 14, and D. 2 and 3, contained herein.

2. The City shall investigate methods to improve fire apparatus access on existing streets and driveways.

3. The City shall adopt an ordinance complying with the Quimby Act provision requiring 3 to 5 acres of open space per 1000 persons in Calistoga for the establishment of additional parks in the City.

4. The City shall initiate a comprehensive plan for development of parks and retention of open space.

5. The City shall annually update its Capital Improvements Plan to ensure that municipal systems are in good repair.

F. Impact: Implementation of the General Plan will impact solid waste services if the proposed expansion of the Cloverflat landfill is not approved.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. The City shall implement a program for reducing solid waste generation and encouraging recycling.

G. Impact: Implementation of the General Plan will impact the Calistoga School District as a result of increased enrolment due to population growth.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Refer to Public Services and Utilities Mitigation Measures A. 1 and 2, 6 contained herein.

2. The City shall consider the adoption of Policies and Requirements to ensure adequate staffing levels for public services.

H. Impact: Implementation of the General Plan will impact library services provided by Napa City/County Library.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Refer to Public Services and Utilities Mitigation Measures A. 1 contained herein.

I. Impact: Implementation of the General Plan will impact the ability of existing parkland to meet future park use demand.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Refer to Public Services and Utilities Mitigation Measures A. 1 and 2 and E. 3 and 4 contained herein.

J. Impact: Implementation of the proposed project will impact administrative services and Community Center Facilities.

Finding: Mitigated to a level of insignificance based on the following:

MITIGATION MEASURES

1. Refer to Public Services and Utilities Mitigation Measures A. 1 and 2 and G. 2 contained herein.

ALTERNATIVES TO THE PROJECT

As required by CEQA, the EIR on the Calistoga General Plan Update included an analysis of alternatives to the project. The purpose of the alternatives analysis, as discussed in the CEQA guidelines, is to provide a "comparative evaluation" of a range of alternatives to determine whether other courses of action could feasibly attain the project's objectives at less environmental cost. The following alternatives were analyzed as part of this project:

A. NO PROJECT ALTERNATIVES

1. No Development - This alternative would limit the City of Calistoga to its current balance of uses and assumes that neither the 1977 nor the proposed General Plan Update will be implemented.

Impact: The transportation and circulation system improvements described as project mitigation will not be constructed, nor will any of the infrastructure or other community services be developed or required.

Finding: The No Development Alternative is environmentally superior to the proposed project. However, it would not contribute to regional or local housing needs and would not bring needed tax revenues and development fees to make needed improvements to the city's infrastructure.

2. Development Under Existing General Plan - This alternative assumes development in the City of Calistoga under the restrictions and regulations of the General Plan adopted on March 15, 1977.

Impact: The implementation of the existing General Plan will have similar impacts as the proposed General Plan to land use, biology, and noise. It is anticipated that the existing General Plan circulation system will be impacted by the implementation of the existing General Plan. The existing General Plan Circulation Element does not include many improvements to the Circulation System to accommodate the 1977 Land Use Plan. Since improvements planned in the proposed General Plan will not be implemented, this alternative will worsen traffic conditions in the City. This will also worsen air quality impacts.

Finding: This alternative will require the need for the following additional city services: water (acre-feet) 760, wastewater (mg/.d) 557, schools (students 638, parks (acres) 14, fire (personnel) 5, and police (personnel) 5. The Development Under Existing General Plan Alternative is environmentally inferior to the project.

3. Alternative Location - This alternative proposes developing the proposed project in another location. CEQA requires that an alternative location for a proposed project be analyzed if one is available.

Impact: Because of the nature of the proposed General Plan the identification of another location that could accommodate the objectives would locate the development outside of the City and the General Plan Study Area.

Finding: Presently, cities are required to meet General Plan requirements within their own community. A location outside of the City and Study Area is not appropriate. This alternative is inferior and is hereby rejected.

B. LOW DENSITY/INTENSITY ALTERNATIVE

This alternative assumes development in the City of Calistoga with a lower density than proposed in the General Plan. Implementation of this alternative assumes an emphasis in development of Rural Residential uses in remaining vacant residential areas.

Impact: The Low Density/Intensity Alternative will increase the present population in the City of Calistoga by 1,922. A total of 2,386 jobs will be created at buildout. This alternative will result in a total of 71,506 average daily trips and an increase in air emissions as shown on Table II of subject EIR. This alternative will have impacts to land use, biology, and noise. This alternative will require the need for the following additional city services: water (acre-feet) 545, wastewater (mg/d.) 469, schools (students) 451, parks (acres) 9.6, fire (personnel) 4, and police (personnel) 4.

Finding: This alternative is slightly superior to the proposed project in terms of traffic and air quality. The Low Density Alternative is environmentally superior to the proposed project. However, it would not contribute to regional or local housing needs and would not bring needed tax revenues and development fees to make needed improvements to the city's infrastructure. This alternative will not eliminate unavoidable significant impacts of the proposed project.

C. HIGH DENSITY/INTENSITY ALTERNATIVE

This alternative assumes development in the City of Calistoga with higher density uses than proposed in the General Plan Update.

Impact: Implementation of the High Density/Intensity Alternative will increase the present population in the City of Calistoga by 4,945. A total of 4,499 jobs will be created at buildout. This alternative will have slightly greater impacts to land use, noise, and biology. The total daily trips for this alternative is 193,334 resulting in increased air emissions. This alternative will require the need for the following additional city services: water (acre-feet) 1,578, wastewater (MG/D.) 1.71, schools (students) 1,137, parks (acres) 24, fire (personnel) 10, and police (personnel) 10.

Finding: The High Density/Intensity Alternative is environmentally inferior to the proposed project and should be rejected from further consideration during the review

process. This alternative will not reduce unavoidable significant impacts of the proposed project.

GROWTH INDUCING IMPACTS

As required by CEQA, the EIR for the City of Calistoga General Plan Update included an assessment of its potential growth-inducing impacts. The City of Calistoga General Plan Update allows for the replacement of open space with urban uses, redevelopment of land with higher intensity uses, and extension of infrastructure to previously isolated areas.

Impact: Implementation of the project will provide for new growth and may stimulate the occurrence of unplanned growth. Road extensions and commercial and industrial uses proposed in the General Plan Update may increase the desirability of new development.

Finding: The need for moderate growth exists in the City of Calistoga. The projected rate of growth and development is consistent with the 2.5-3% growth rate and the desired limitations on water and sewer capacities of the community.

SHORT-TERM USE VERSUS LONG-TERM ENVIRONMENTAL PRODUCTIVITY

The EIR for the City of Calistoga General Plan Update includes, pursuant to the requirements of CEQA, an analysis of how the project balances the short-term with the long-term impacts on the productivity of the environment.

Short-term Impact: Development of the proposed land uses and circulation system will result in short-term impacts including additional traffic and construction related noise, reduction in air quality, and deterioration of water quality. Implementation of specific projects will result in an increase in the potential for localized erosion.

Long-term Impacts: Long-term impacts resulting from implementation of land use designations include moderate urbanization, decreases in biological habitat and species diversity, decrease in natural topography and open space, increased demand for circulation and roadway improvements, increased demand on infrastructure and facilities to provide community services and public utilities, an increase in ambient noise levels resulting from increased traffic and urban activities, and in Napa Valley's air quality resulting from increased emissions of dust, exhaust, and other airborne particles. Other concerns include risks associated with development on or near earthquake faults and other geologically unstable sites.

Finding: The proposed General Plan provides for comprehensive and long-term preservation of "open space land" and natural features in the Conservation, Land Use, and Open Space Elements. As such, the City has provided for incremental growth to meet housing and economic needs while maintaining the rural character and uncrowded conditions of the City. Mitigation implemented on a project specific basis will adequately control these potential short-term and long-term impacts.

UNAVOIDABLE AND IRREVERSIBLE ADVERSE IMPACTS

Approval of the City of Calistoga General Plan Update will direct the order and magnitude of future growth in and around the City. General Plan designation implementation will commit certain areas to urban use.

Impact: Several irreversible commitments of limited resources would result from implementation of urban/residential Land Use designations. These resources include, but are not limited to, the following: lumber and other forest related products; sand, gravel, and concrete; asphalt; petrochemical construction materials; steel, copper, lead, and other metals; and water. There will also be losses in open space, species diversity, and natural vegetation.

Future projects will add to the long-term incremental increase in noise and air quality degradation in and around the City of Calistoga.

The proposed project will involve an irreversible commitment of labor and capital investment and an increased demand for public services.

Finding: The EIR concluded that most of the unavoidable and irreversible adverse impacts of the project were limited in nature. The City finds that adoption of the mitigation measures contained herein will substantially mitigate the unavoidable and irreversible adverse impacts.

BE IT FURTHER RESOLVED that upon review and consideration of the "CERTIFIED EIR" and other documents prepared as part of the General Plan Update process, the City Council of the City of Calistoga adopts the following Statement of Overriding Consideration in regard to the unavoidable significant adverse impacts identified above and contained in the "CERTIFIED EIR" pursuant to Section 15093 of the CEQA Guidelines:

STATEMENT OF OVERRIDING CONSIDERATION


1. The General Plan is consistent with the intent of Association of Bay Area Governments (ABAG) Regional Plan which designates more urban, densely populated development.
2. The General Plan achieves affordable housing goals while protecting environmental resources.
3. The General Plan would maintain social diversity in the community through providing affordable housing opportunities.
4. The General Plan allows economic growth which supplies jobs for existing and future residents while protecting environmental resources and prudently managing traffic capacity.
5. The General Plan provides for the orderly expansion and efficient use of public facilities and services.
6. The General Plan provides for reasonable economic use of private property.

ADOPTED, SIGNED AND APPROVED this 16th day of October, 1990
by the following vote:

AYES: Councilmember Marberry, Mayor Pro-Tem Oyarzo and Councilmember Beck

NOES: None

~~ABSENT~~ ABSTAIN: Councilmembers Maxfield and Mayor Hughes



LAVERNE OYARZO, Mayor Pro-Tem
City of Calistoga

ATTEST:



NATASHA MERKULOFF, City Clerk
City of Calistoga

By: PATT OSBORNE, Deputy

RESOLUTION NO. 90-33

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
CALISTOGA, COUNTY OF NAPA, STATE OF CALIFORNIA,
ADOPTING THE CALISTOGA GENERAL PLAN UPDATE 1990.

WHEREAS, the City Council of the City of Calistoga adopted A General Plan for the City of Calistoga on March 15, 1977; and

WHEREAS, State law grants authority to the City of Calistoga to amend its General Plan; and

WHEREAS, the General Plan Amendment is intended to provide comprehensive and long-term guidance to community development; and

WHEREAS, the City of Calistoga Planning Commission conducted four public workshops, three public study sessions, and one public hearing during the year 1990 regarding the General Plan Update and made proper public notification of these meetings; and

WHEREAS, the City Council of the City of Calistoga conducted three public workshops and one public hearing during the year 1990 regarding the General Plan update and made proper public notification of these meetings; and

WHEREAS, the Final EIR was certified as complete by the City Council October 16, 1990 and said body determined that the California Environmental Quality Act requirements have been met and adopted suitable findings including a Statement of Overriding Considerations; and

WHEREAS, on September 26, 1990 the City of Calistoga Planning Commission, by a 5-0 vote, recommended to the City Council that the final EIR was complete and further recommended adoption of the General Plan Update.

WHEREAS, the Calistoga General Plan Update 1990 is comprised of seven mandatory elements and one optional element (Geothermal Element) and includes the following documents:

1. General Plan Update Volume I, MEA and Issues and Options; the cover page of which is attached hereto as Exhibit A;
2. General Plan Update Volume II, Policy and Program Document and addenda; the cover pages of which are attached hereto as Exhibit B;

3. General Plan Update Volume III, Environmental Impact Report and Final EIR; the cover pages of which are attached hereto as Exhibit C;

4. Traffic Analysis Land-Use Options Assessment, General Plan Update, City of Calistoga, California, May/1990; the cover page of which is attached hereto as Exhibit D;

5. Traffic Analysis of Three Street Improvement Alternatives, City of Calistoga, California, March/1989; the cover page of which is attached hereto as Exhibit E;

6. Technical Supplement to the Noise Element of the City of Calistoga General Plan, October/1989 and Addendum, July/1990; the cover pages of which are attached hereto as Exhibit F;

7. Seismic Safety Element of the County of Napa adopted by the Napa County Board of Supervisors June/1983 and amended October/1983, January/1984, and November/1986; the cover page of which is attached hereto as Exhibit G; and

8. Land Use Diagram, a map delineating general plan land use designations for specific properties within the City Limits of the City of Calistoga which is attached hereto as Exhibit H.


NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Calistoga does hereby adopt the Calistoga General Plan Update 1990.

ADOPTED, SIGNED AND APPROVED this 16th day of October, 1990 by the following vote:


AYES: Councilmember Marberry, Mayor Pro-Tem Oyarzo, and Councilmember Beck

NOES: None

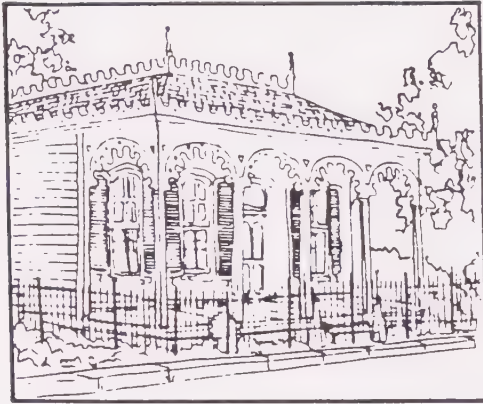
~~XXXXXX~~
~~ABSENT~~ ABSTAIN: Councilmember Maxfield, and Mayor Hughes


LAVERNE OYARZO, Mayor Pro-Tem
City of Calistoga

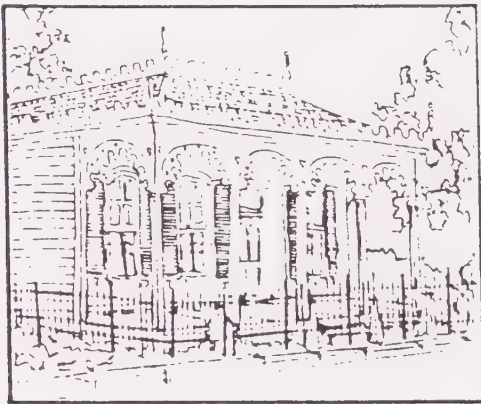
ATTEST:


NATASHA MERKULOFF, City Clerk
City of Calistoga

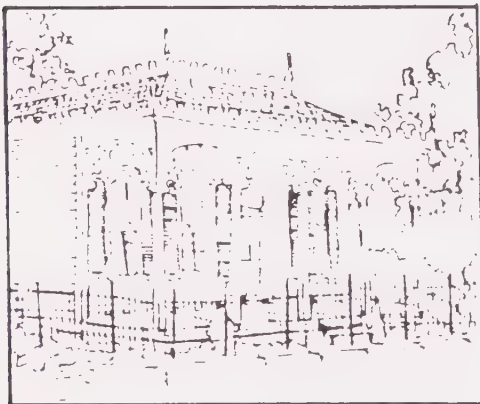
By: PATT OSBORNE, Deputy



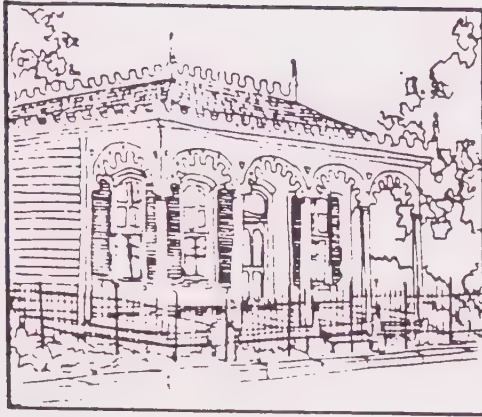
GENERAL PLAN UPDATE



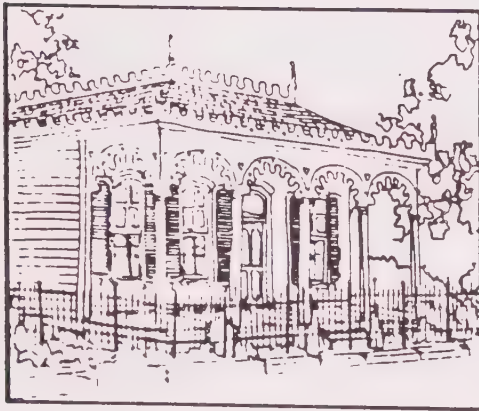
MEA and Issues & Options



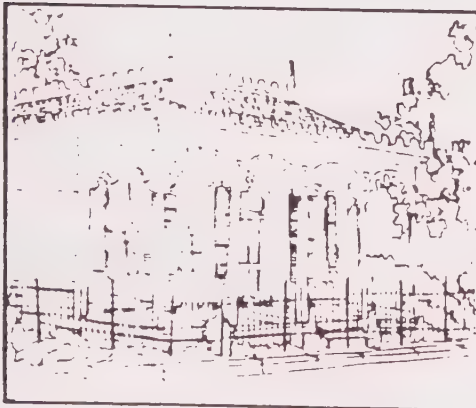
City of Calistoga
Volume I



GENERAL PLAN UPDATE



Policy and Program Document



City of Calistoga
Volume II

ADDENDUM¹

HOUSING ELEMENT

INTRODUCTION

The Housing Element consists of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. The housing element identifies adequate sites for housing, including rental housing, factory-built housing, and mobilehomes, and shall make adequate provision of the existing and projected needs of all economic segments of the community.

Several major findings were made in the General Plan Master Environmental Assessment (MEA) and Issues & Options report including: affordable housing objectives as well as other objectives from the 1985 Housing Element have not been met; there is a lack of larger rental units for larger families; each year 40 or more homeless persons, usually single males, have sought shelter especially at churches; there have been difficulties in retaining rehabilitated rental units for prior low-income occupants; there are limited amounts of land for multi-family development; and due to chronic limitations on sewer and water services, population growth is limited to less than three percent per annum.

GOALS, POLICIES, AND IMPLEMENTATION PROGRAMS

GOAL A: *To provide a range of housing types for all economic segments of the community.*

POLICIES

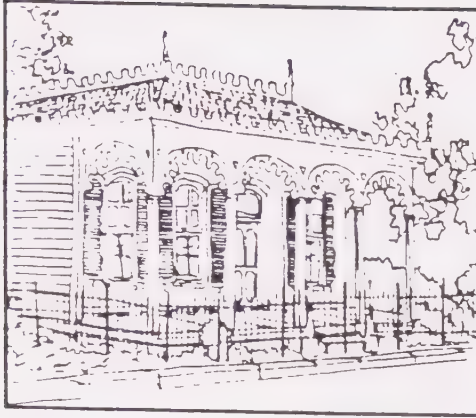
1. Make every effort to provide affordable housing for those people who live and work in Calistoga, to meet all income levels, and to meet the City's fair share of housing as determined by ABAG.
2. Provide information to the public and developers on approved residential projects and vacant land supply.

¹Due to wordprocessing/editing error, the changes underlined or struck-out were inadvertently omitted from the draft Housing Element prepared on June 7, 1990. This addendum represents the proposed Housing Element of the Calistoga General Plan. The General Plan Responsibility Matrix in the June 7, 1990 document corresponds with this Addendum.

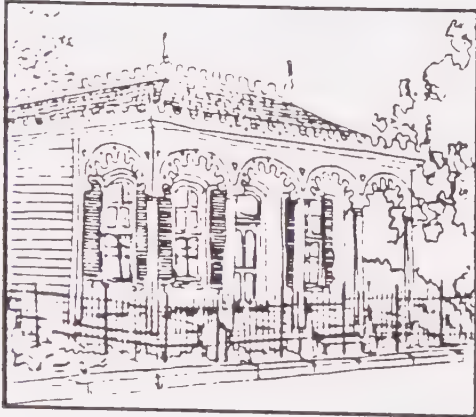
CITY OF CALISTOGA
PLANNING COMMISSION RECOMMENDATIONS
GENERAL PLAN POLICY AND PROGRAM DOCUMENT

CITY OF CALISTOGA
1232 WASHINGTON STREET
CALISTOGA, CALIFORNIA 94515

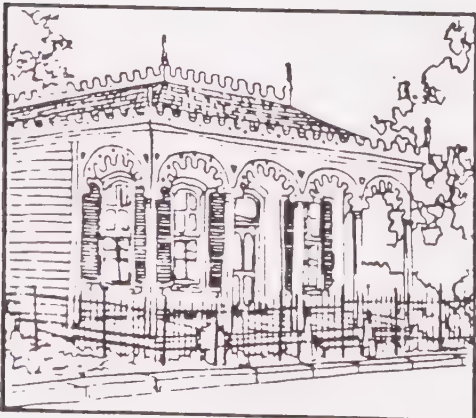
SEPTEMBER 26, 1990



GENERAL PLAN UPDATE



Environmental Impact Report



City of Calistoga
Volume III

Draft EIR: July 27, 1990
Certified Final EIR: _____

**GENERAL PLAN UPDATE
FINAL EIR**

STATE CLEARINGHOUSE NUMBER:

90030423

PREPARED FOR:

**CITY OF CALISTOGA
1232 WASHINGTON STREET
CALISTOGA, CALIFORNIA 94515**

PREPARED BY:

**STA PLANNING, INC.
250 MONTGOMERY STREET, SUITE 1000
SAN FRANCISCO, CALIFORNIA 94104**

SEPTEMBER 26, 1990

**TRAFFIC ANALYSIS
LAND-USE OPTIONS ASSESSMENT
GENERAL PLAN UPDATE
CITY OF CALISTOGA, CALIFORNIA**

MAY 1990

**prepared for
City of Calistoga**

**Prepared by
Allan G. Tilton, P.E.
Consulting Traffic Engineer
P.O. Box 54
8168 Speer Ranch Road
Forestville, California
95436**

**TRAFFIC ANALYSIS
OF THREE STREET
IMPROVEMENT ALTERNATIVES
CITY OF CALISTOGA, CALIFORNIA**

MARCH 1989

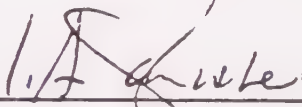
**prepared for
City of Calistoga**

**Prepared by
Allan G. Tilton, P.E.
Consulting Traffic Engineer
P.O. Box 54
8188 Speer Ranch Road
Forestville, California
95438**

REPORT 1538R/29A/30A

TECHNICAL SUPPLEMENT TO THE
NOISE ELEMENT OF THE CITY OF CALISTOGA GENERAL PLAN

PREPARED BY:



T. A. Barnebey, Ph.D.
Principal Consultant

Sound Solutions acoustical consulting services

SUBMITTED TO:

Richard Spitler
Planning Director
City of Calistoga
1232 Washington Street
Calistoga, CA 94515

23 October 1989

Addendum to the Technical Supplement to the
NOISE ELEMENT OF THE CITY OF CALISTOGA GENERAL PLAN

PREPARED BY:



J. A. Barnebey, Ph.D.
Principal Consultant

Sound Solutions acoustical consulting services

SUBMITTED TO:

Richard Spitler
Haworth Marshall Inc.
1230 Pine Street
St. Helena, CA 94574

10 July 1990

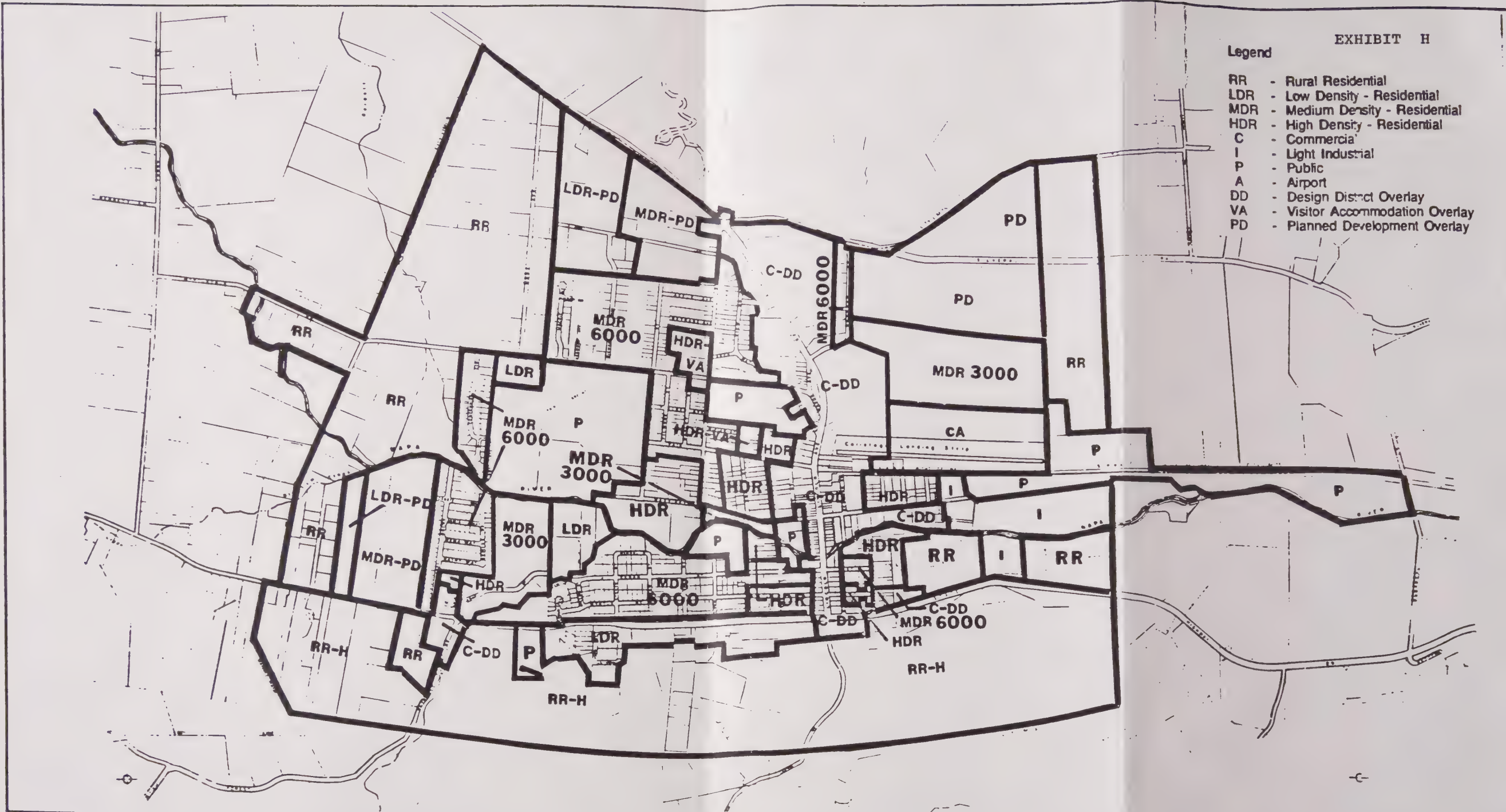
SEISMIC SAFETY



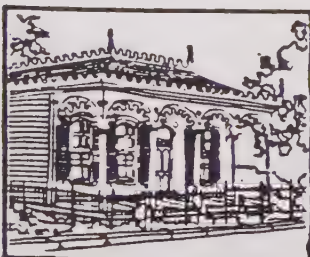
GENERAL PLAN

Legend

- RR - Rural Residential
- LDR - Low Density - Residential
- MDR - Medium Density - Residential
- HDR - High Density - Residential
- C - Commercial
- I - Light Industrial
- P - Public
- A - Airport
- DD - Design District Overlay
- VA - Visitor Accommodation Overlay
- PD - Planned Development Overlay

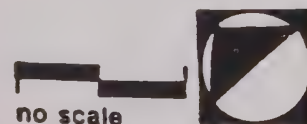


Source: City of Calistoga



LAND USE PLAN

PROGRAM AND POLICY DOCUMENT
City of Calistoga



no scale

Exhibit 3

III. STAFF REPORTS AND MEETING MINUTES

Planning Commission
September 12, 1990

MEMORANDUM

TO: Planning Commission

FROM: Richard Spitler,
Consulting Planning Director

Subject: General Plan Update

Date: September 7, 1990

The Planning Commission has recommended a General Plan for the City of Calistoga. Upon receiving this document the City Council held a public hearing on August 21, 1990. After receiving several comments the Council asked the Planning Commission to review the public comments and give the City Council a recommendation.

Since this hearing several other actions have taken place that affect the General Plan update. These are discussed below. Staff will ask the Planning Commission to respond to these items as they deem appropriate.

The City Council has expressed the desire to complete the general plan update process as soon as possible. The closing date for State agency comment on the draft EIR is September 21, 1990. After this date the Council can adopt the plan. It is anticipated that this will be accomplished on either October 1 or 2, 1990, depending on when they hold their regular meeting.

City Council Comments:

The City Council made the comments on the Policy Plan during their August 7 and 9th workshops (Attachment). Staff recommendations follow the individual comments.

Public Comments:

Attachment are the comments received during the public testimony at the August 21st hearing before the City Council. Staff recommendations follow the individual comments.

Agency Comments:

Housing and Community Development (HCD): HCD has statutory authority to review and comment on the Housing Element. They have prepared a letter which is attached. Staff has prepared a draft response and incorporated changes in the MEA and Housing Element to address their concerns. (Attachment)

Division of Mines and Geology(DM&G): DM&G has statutory authority to review and comment on the general plan update. To date, no comments have been received. Comments are expected shortly. Any comments are not expected to be substantial because of the lack of extensive mining operations in the City.

Airport Land Use Commission(ALUC): The ALUC was asked to comment on the general plan. They are holding a workshop in Calistoga on September 11th. Hodges and Shutt, airport planners, will give a presentation. They have prepared a discussion paper giving alternatives for the future direction of the airport.(Attachment) The first is for it to remain a special use airport with just the glider operation. The second is a public use airport open to general aviation. Each alternative has different implications for the design of the airport and allowable adjacent uses. It is staff recommendation that the Commission review the material and attend the workshop. It then may be appropriate to add goals and policies to the Land Use, Safety and Noise Elements.

Draft Environmental Impact Report:

The public review period closed on August 31, 1990. No comments were received. The state agency comment period closes September 21, 1990. The draft EIR identifies several environmental impacts associated with the Planning Department's recommended general plan. A few of the impacts will need Statements of Overriding Consideration. Staff is currently preparing the final EIR taking into consideration the Planning Commission's recommendation(called the Mitigated Plan). At this point staff believes that the Mitigated Plan will not alter the analysis and findings of the draft EIR. The final EIR(in the form of an addendum) will be released as soon as we have received state agency comments). The City Council must adopt resolutions to certify the final EIR as complete and Findings of Fact and Overriding Considerations before they can adopt the general plan.

Staff Recommendation:

Staff recommends that the Planning Commission take action on the following items:

1. Offer any comments on the adequacy of the Draft Environmental Impact Report; and,
2. Make final recommendations on the contents of Volumes One(MEA) and Two(Policy Plan) to the City Council.

Respectfully submitted,

Richard D. Spitler,
Consulting Planning Director

Summary of Public Testimony
at the
August 21, 1990 General Plan Public Hearing

Rudolph L. Heuser

Summarized his August 18, 1990 written comments submitted to the City Council (See Attached)

Donald Selvey:

Believes that there is need to change the existing general plan but not enough of the good points were brought into the new plan. However, the proposed plan especially the implementation section should be more active and not so passive. Also, it is too wordy and general. The study area should include hillside areas to the north and south. The planned industrial designation needs more study. There should be an historical overlay zone.

Michael Gallis:

Summarized a letter prepared for him by Gylfi Palsson dated August 1990 (Attached). This letter suggests that Commercial use is appropriate for his property located off Money Lane.

Jean Hughes-Wright:

Spoke on behalf of the homeowners who reside on White Lane. She expressed concern about having MDR-PD next to the agricultural RR properties on White Lane. They would like to see an open space or green belt buffer between the MDR-PD and the RR lands.

Howard Cream:

Wants the general plan to extend from Dunaweal to Tubbs Lane. Kimball Dam should also be included. By allowing commercial use of these areas, additional tax revenues would accrue to the City. Mt. Washington should not be designated for open space because it is taking away property owner rights.

John Merchant:

Expressed his support for commercial use at the front of his airport property. He expressed objection to mentioning that the airport property and Mt. Lincoln as open space. He feels he is taking on too much of the burden for open space in the city.

Judy Jones:

Suggested that the Lower Washington area should be commercial just like near the Napa River. If not this the VA designation should be added to the HDR.

She also believes that the finger of land between Calistoga Mineral Water and Brannan Avenue should be Planned Development because what it becomes will depend on what is done on the Maxfield property across the street. If not this it should be Low Density- PD.

Jeff Bounsall:

Expressed his concerns regarding the water division between commercial(40%) and residential(60%) and requested that the percentages be reversed. This would allow more commercial development which would bring more taxes to the City. For the Milton Wright trust property, if there is not a commitment to get more water, then it should be designated to Rural Residential.

Ana Gonzales:

Wants the Lower Washington to remain Commercial because she wants to turn a house she owns into a day care center.

Cece Miller:

Gave a list of businesses that the general plan should encourage which would keep a small town atmosphere and which would bring people to Calistoga such as shoe repair shops, cleaners etc.

Chris Vechos:

Asked that his property located on Mora Avenue(2223/4) remain Low Density Residential and not be changed to Rural Residential. He paid extra street assessments based on the development potential for R-1 and now it is being changed.

David Cunningham:

Suggested a people oriented approach towards solving the affordable housing issue and not just a density approach. Recommended that smaller lot size should be allowed(3,000 - 4,000 sq.ft. in size).

J-Paul Dumont:

Requested that the specific policy language for the PD as it applies to his property be changed to read as follows:

f. Land uses shall be limited to Rural Residential, vineyards and Visitor Accomodation to include: transient lodging such as hotel motel, and destination resort and related visitor services such as restaurant, recreational amenities, wine storage and sales, spa and retail shops. These related services must be clearly secondary to the transient lodging use. All the allowed uses shall be subject to the Planned Development permit review and approval process.

CITY COUNCIL COMMENTS ON
PLANNING COMMISSION GENERAL PLAN RECOMMENDATION
WORKSHOPS AUGUST 7 AND 9, 1990
WITH PLANNING COMMISSION RECOMMENDATIONS

1. The housing element should define what is affordable housing and differentiate between rental and ownership.

Staff Response:

Staff agrees that this would be helpful. Suggest that the following policy be added to Goal A as Policy 12 of the Housing Element (Page 41):

12. The City defines "Affordable" housing as housing affordable for households whose annual income does not exceed 120 percent of Napa County's median income as published by HUD on an annual basis. Rental housing is considered affordable when the rental rates are affordable to households whose annual income does not exceed 80 percent of the median income as published by HUD. It is estimated that approximately 30 percent of the annual income is for house or rental payments.

Planning Commission Response:

The Planning Commission concurs with staff response.

2. The light industrial land use designation should have provision to limit size and bulk of buildings.

Staff Response:

Staff agrees that this would be helpful. Suggest that the following language be added to Page 11, last sentence to read:

Development must be appropriately designed, landscaped, minimize size and bulk of individual buildings and have ample on-site parking.

Planning Commission Response:

The Planning Commission concurs with staff response.

3. The Maxfield/Adams Beverage Co. properties should remain PD but allow a person to propose a mixed land use plan including division of the land into large parcels. The range of uses should include visitor accomodation and services and residential uses as well. A senior retirement care facility could also be included.

Staff Response:

Staff suggests the following language:

MAXFIELD/ADAMS BEVERAGE PROPERTY:

a. Development must be sensitive to the natural landscape, scenic vistas and site features. This includes setbacks along the creek. Measures should be taken to preserve the natural vegetation on Mt. Washington as much as possible. Grading of the property shall be minimized.

b. Development must be harmoniously integrated into the property to minimize impact on adjacent land uses. This includes careful siting of lighting, noise generators, and building location, height and style.

c. An evaluation of wetlands, preservation of oak trees and other environmental concerns with suggested mitigation measures shall be submitted with project application.

d. A detailed landscaping plan shall be submitted along with project application. This plan shall provide at least a buffer along Silverado Trail. A landscaped berm or other screening shall be provided along the boundary with the mobile home park. Consideration should be given to include a pedestrian pathway leading to Mt. Washington.

e. A geotechnical report and preliminary drainage plan shall be submitted along with the application to address soil erosion, drainage, maintenance of the drainage ditch, flooding and slope stability.

f. Passive recreation opportunities should be considered on Mt. Washington for residents of Calistoga. Access to this landmark should be provided if used for recreation purposes.

g. A traffic circulation plan and parking shall integrate all uses to safely access Silverado Trail. This is especially the case if the property is further subdivided into smaller parcels prior to indication of intended use.

h. Land uses shall be limited to Residential and Visitor Accomodation uses: transient lodging including hotel motels, and destination resorts and related visitor services such as restaurant, recreational amenities, wine retail sales and storage, spa, and retail shops. These related services must be clearly secondary to the transient lodging use. Residential uses include estate homes, mixed density developments, and senior retirement center. All allowed uses shall be subject to the Planned Development permit review and approval process. A mix of land use types is allowed provision all of the provisions set forth above are addressed.

Planning Commission Response:

The Planning Commission concurs with staff response.

4. There should be an expansion of water policy discussion in the general plan including a requirement that all water users should be subject to the RMS and that uses take advantage, where feasible, of the reclaimed water for landscaping purposes.

Staff Response:

Add the following policies to Goal F, Policies of the Conservation Element on Page 58a.

6. All water users connected to the City's water and sewer system shall adhere to the requirements of the City's Resource Management System.

7. Any new uses or expansion of existing uses shall examine whether they can use reclaimed wastewater as a part of the project landscaping.

Planning Commission Response:

The Planning Commission concurs with staff response.

5. The scenic highway provisions should be applied to the Foothill 128 entrance to the City (up to Petrified Forest Road).

Staff Response:

Page 33 Policy 5 should be changed to read:

The City will establish a scenic highway overlay in the Zoning Code to ensure development retains scenic vistas along Silverado Trail, Highway 128 between the western city limits and Petrified Forest Road;and, Lake County Highway. This can be accomplished by retaining large acreages in Rural Residential, in Low Density Residential and Medium Density Residential and other areas by retaining landscaped pedestrian/bicycle pathways and limiting structures adjacent to the roadways to one story.

Page 61 Policy 8 should be changed to read:

Silverado Trail, Highway 128 between the western city limits and Petrified Forest Road;and, Lake County Highway shall be designated as scenic highways. This can be accomplished by retaining large acreages in Rural Residential, in Low Density Residential and

Medium Density Residential and other areas by retaining landscaped pedestrian/bicycle pathways and limiting structures adjacent to the roadways to one story.

Planning Commission Response:

The Planning Commission concurs with staff response except that Petrified Forest Road should be added to the list of scenic highways, as it is a major entrance to the city.

CITY OF CALISTOGA PLANNING COMMISSION
MINUTES SEPTEMBER 12, 1990

The City of Calistoga Planning Commission met in regularly adjourned meeting from the August 22, 1990, meeting at the Calistoga Community Center with Chairperson Frasca and Commissioners Atkinson, Dinsmoor, Hunter and Shaw in attendance. The meeting was called to order at 7:05 p.m. with Chairperson Frasca presiding.

U 90-8. ABE NEWMAN

COMMISSIONER SHAW STEPPED DOWN DUE TO A
POSSIBLE CONFLICT OF INTEREST

Jo Noble, Associate Planner, presented a staff memorandum dated September 6, 1990, regarding the approval of compliance with Conditions 12 and 18 of U 90-8, approved July 25, 1990.

The Commission agreed that they were satisfied the conditions have been met, as long as Staff concurred with the change in compact parking spaces and Chairperson Frasca wanted assurance that the gate on unit #4 swings in rather than out onto the sidewalk. There was also a question as to why the brick paving strip was so wide.

Lou Gerhardt, project Architect, stated the gate swings in as shown on the plans, and that the latest plans were rushed. He is willing to make any minor revisions as necessary.

Staff explained that minor alterations can be made if necessary, without the plans being brought back to the Commission.

It was moved by Commissioner Atkinson, seconded by Commissioner Dinsmoor and unanimously carried to approve the fence and amended elevation plans dated August 24, 1990, and Revised Parking Plan dated September 6, 1990, with the recommended amendment to size and location of trash enclosure for compliance with Conditions 12 and 18 of Use Permit U 90-8, based on the facts included in the Staff Memorandum dated September 6, 1990.

COMMISSIONER SHAW RETURNED TO HER DUTIES AS COMMISSIONER

U 89-8, T 89-4, SARATOGA MANOR, PUBLIC HEARING

Jo Noble, Associate Planner, presented a Staff Memorandum dated September 5, 1990, regarding the consideration of an additional condition of approval of Saratoga Manor, Use Permit U 89-8 and Tentative Map T 89-4.

Chairperson Frasca opened the public hearing asking three times to hear comments in favor or against this project.

Norbert Doran, 1001 Second Street, Napa, developer of the property, had no objection to the added condition.

As there was no other response, the public hearing was closed with the Chair reserving the right to reopen the hearing later, if necessary.

It was moved by Commissioner Dinsmoor, seconded by Commissioner Shaw and unanimously carried to approve the amendment to the conditions of approval of Use Permit U 89-8, and T 89-4, based on the facts and findings of the Staff Memorandum dated September 5, 1990, by adding the following condition:

The cover of the Final Subdivision Map shall bear the message that: This subdivision is in the area subject to potential overflight by aircraft using Calistoga Soaring Center, and as a result, residents of the site may experience inconvenience or discomfort arising from the noise of such operations. State Law (Public Utilities Code Section 21670 et seq.) establishes the importance of public use airports to protection of the public interest of the people of the State of California, and residents of property near a public use airport should therefore be prepared to accept such inconvenience or discomfort from normal aircraft operations. Any lease sublease or document evidencing sale of any part of the property herein shall contain a statement in substantially the form stated above."

GENERAL PLAN UPDATE - DRAFT ENVIRONMENTAL IMPACT REPORT (EIR)
VOLUME III

Chairperson Frasca read the following statement:

"To comply with accepted procedures regarding Commissioners meeting with applicants, I would like to make the Planning Commission aware of the substance of my meeting with Mr. Maxfield. We met on or about August 7, 1990, at his request. The subject of his discussion with me was the potential development of his property on the corner of Brannan Street and Silverado Trail and his concerns regarding the options available to him. I did not give Mr. Maxfield an opinion regarding his concerns."

Richard Spitler, Contract Planning Director, presented a Staff Memorandum dated September 7, 1990, regarding responses to public comments received by the City Council during a General Plan Public Hearing conducted on August 21, 1990; and the City Council Workshops on August 7 and 9, 1990.

Mr. Spitler also presented the Commission with the latest revised Housing Element and a draft Policies and Goals for Calistoga Airport document.

Staff and the Commission reviewed all documents. The Commission concurred, not only with staff's responses of the public testimony from the City Council Public Hearing, but also the policy statements for the Calistoga Airport. The Commission agreed that the Calistoga Airport would be better kept as a gliderport. The Commission agreed to absorb into the General Plan the Division of Mines and Geology response by Staff, the HCD comments, the latest revised Housing Element dated September 12, 1990. The Commission reviewed the City Council's discussions from the August 7 and 9, 1990, workshops and accepted the recommended changes to the General Plan as put forth in the Staff Report dated September 7, 1990. The Commission suggested a few additional changes to Volume II of the General Plan as follows:

1) As Mr. Merchant objected to the restrictive language defining open space as his airport property has been designated as being one of Calistoga's open spaces, the Commission agreed to amend Implementation Program statement #1 to read: The City will encourage (instead of the City will limit) limiting of Mt. Washington and Mt. Lincoln. Oak Hill Trail Road and other recreational areas to low intensive uses such as: bicycle and hiking trails, educational signage, benches and fencing in accordance with the Land Use Element.

2) Pursuant to staff's response of a public comment, the Commission agreed to add a policy statement to Goal B, #6 (page 29) of the Land Use Element: Encourage the establishment of businesses that provide goods and services primarily for Calistoga residents. Also add statement under Implementation Program #6: City will amend the zoning code to provide for the addition of a resident-oriented commercial district.

3) Amend Implementation Program statement #8 (page 33) under Land Use Element, to read: The City will require a Conditional Use Permit for any fast food establishments or franchises subsequent to extensive design review; (delete the inclusion of...or other eating establishments).

The Commission was asked to offer additional recommendations to the City Council regarding the draft EIR. However, some commissioners had not yet finished reading the EIR and staff is still waiting to receive further public agency comments on the EIR. Therefore, discussion and additional recommendations to the City Council regarding the EIR should be continued to the next meeting.

It was moved by Commissioner Atkinson, seconded by Commissioner Shaw and unanimously carried to continue discussion and recommendation to the City Council regarding the General Plan EIR to September 26, 1990.

CITY COUNCIL ACTIONS

Staff gave a brief summary of the last City Council meeting of September 11, 1990.

ANNOUNCEMENTS/CORRESPONDENCE

Staff announced that the Land Use Moratorium will expire in October. Staff is recommending the extension of the moratorium for another year.

ADJOURNMENT

It was moved by Commissioner Hunter, seconded by Commissioner Shaw and unanimously carried, to adjourn the meeting at 10:15 p.m.

Heidi Bumgarner, Secretary


APPROVED:

Sal Frasca, Chairperson

Planning Commission
September 26, 1990

MEMORANDUM

TO: Planning Commission

FROM: Richard Spitler, 
Consulting Planning Director

SUBJECT: Calistoga General Plan Update

DATE: September 20, 1990

Enclosed please find a write-up of the changes made to the MEA and the Policy plan that represent the consensus of the Planning Commission at its September 12, 1990 meeting.

You should have received a copy of a letter sent by J-Paul Dumont regarding the Silver Rose property. Apparently he does not feel that the changes made are what he had asked for in his testimony before the City Council. The Commission should look at his suggested language changes. If it is agreeable then these changes should also be applied to the Maxfield /Adams Beverage Property.

Sometime early next week the Commission should be receiving an addendum to the MEA, a clean copy of the policy plan and a final EIR(with all of the state comments and the findings of fact).

I do not think this information is new(except for maybe a state agency response or two) but just rearranged to fit towards the final products of the general plan.

Staff is looking for the Commission to send a final recommendation to the City Council on the general plan update at the upcoming meeting on September 26, 1990. Please let me know if you have any questions.

Attachments

Planning Commission Changes to the General Plan
September 12, 1990

MEA:

Add additional hazardous waste sites to text of MEA as recommended by County Health Department.

The Commission has agreed to add suggested additions to the Health and Safety section of the MEA addressing Division of Mines and Geology concerns.

The Commission has agreed to add suggested additions to the Housing Section.

Policy Plan:

The Commission has agreed to add suggested additions to the Housing Element.

Element Plans and Diagrams:

Page 9 (HDR) High Density Residential:

Add **mobile home parks** to the list of allowable uses.

Page 11 (C) General Commercial: change fifth sentence in first paragraph to read: No uses are allowed if it is determined that the use would have **a significant demand on the City water and/or sewer system on an annual basis.**

Page 11. last sentence to read:

Development must be appropriately designed, landscaped, **minimize size and bulk of individual buildings** and have ample on-site parking.

Page 11a. Add following paragraph to end of page:

Accessory commercial uses such as retail outlet, eating establishments, and offices are allowed with discretionary permit review or as a part of an overall industrial park plan approval.

Page 18 Change the numbering of the individual items to coincide with the map on Page 19.

Page 19, Exhibit 4, Circulation Plan. Changes to the map are to be made to show the following:

a) The realignment of Petrified Forest Road and Cedar

Street should be indicated.

b) The Dunaweal/Silverado Trail realignment should be deleted from map.

Page 29, Goal B, Policies

Add Item: **6. Encourage the establishment of businesses that provide goods and services primarily for Calistoga residents.**

Add Item to Implementation: **6. City will amend the zoning code to provide for the addition of a resident-oriented commercial district.**

Page 33 Policy 5 should be changed to read:

The City will establish a scenic highway overlay in the Zoning Code to ensure development retains scenic vistas along Silverado Trail, **Highway 128 between the western city limits and Petrified Forest Road; Petrified Forest Road; and, Lake County Highway.** This can be accomplished by retaining large acreages in Rural Residential, in Low Density Residential and Medium Density Residential and other areas by retaining landscaped pedestrian/bicycle pathways and limiting structures adjacent to the roadways to one story.

Page 33, Implementation Item 8.

Change to read: The City will require a Conditional Use Permit for any fast food establishments **or franchises subject to extensive design review.**

Page 33a, Maxfield/Adams Beverage Property:

Change MAXFIELD/ADAMS BEVERAGE PROPERTY to read:

a. Development must be sensitive to the natural landscape, scenic vistas and site features. This includes setbacks along the creek. **Measures should be taken to preserve the natural vegetation on Mt. Washington as much as possible.** Grading of the property shall be minimized.

b. Development must be harmoniously integrated into the property to minimize impact on adjacent land uses. This includes careful siting of lighting, noise generators, and building location, height and style.

c. An evaluation of wetlands, preservation of oak trees and other environmental concerns with suggested mitigation measures shall be submitted with project application.

d. A detailed landscaping plan shall be submitted along with project application. This plan shall provide at least a buffer

along Silverado Trail. A landscaped berm or other screening shall be provided along the boundary with the mobile home park. Consideration should be given to include a pedestrian pathway leading to Mt. Washington.

e. A geotechnical report and preliminary drainage plan shall be submitted along with the application to address soil erosion, drainage, maintenance of the drainage ditch, flooding and slope stability.

f. Passive recreation opportunities should be considered on Mt. Washington for residents of Calistoga. Access to this landmark should be provided if used for recreation purposes.

g. A traffic circulation plan and parking shall integrate all uses to safely access Silverado Trail. This is especially the case if the property is further subdivided into smaller parcels prior to indication of intended use.

h. Land uses shall be limited to Residential and Visitor Accommodation uses: transient lodging including hotel motels, and destination resorts and related visitor services such as restaurant, recreational amenities, wine retail sales and storage, spa, and retail shops. These related services must be clearly secondary to the transient lodging use. Residential uses include estate homes, mixed density developments, and senior retirement center. All allowed uses shall be subject to the Planned Development permit review and approval process. A mix of land use types is allowed provided all of the provisions set forth above are addressed.

Page 33b, Silver Rose Inn Property

Change Item f to read: f. Land uses shall be limited to Rural Residential, vineyards and Visitor Accommodation to include: transient lodging such as hotel motel, and destination resort and related visitor services such as restaurant, recreational amenities, wine storage and sales, spa and retail shops. **These related services must be clearly secondary to the transient lodging use.** All the allowed uses shall be subject to the Planned Development permit review and approval process.

Page 41, Goal A , Housing Element

Add as Policy 12: **12. The City defines "Affordable" housing as housing affordable for households whose annual income does not exceed 120 percent of Napa**

County's median income as published by HUD on an annual basis. Rental housing is considered affordable when the rental rates are affordable to households whose annual income does not exceed 80 percent of the median income as published by HUD. It is estimated that approximately 30 percent of the annual income is for house or rental payments.

Page 58, Conservation Element, Goal F

Change Goal F to read: To promote beneficial use and protection of **water** resources in Calistoga and vicinity.

Page 58a , Goal F, policies

Add as Policies 6 & 7:

6. All water users connected to the City's water and sewer system shall adhere to the requirements of the City's Resource Management System.

7. Any new uses or expansion of existing uses shall examine whether they can use reclaimed wastewater as a part of the project landscaping.

Page 59, Implementation Program

Add: 7. The City will monitor the water distribution system losses and seek funding to repair system leaks.

Page 61, Open Space element, Implementation

Change Item 1 to read: The City will **encourage the use of** Mt. Washington and Mt. Lincoln, Oat Hill Trail Road, and other recreational areas **for** low intensive uses such as: bicycle and hiking trails, educational signage, benches and fencing in accordance with the Land Use Element.

Page 61 Policy 8 should be changed to read:

Silverado Trail, Highway 128 between the western city limits and Petrified Forest Road, Petrified Forest Road; and, Lake County Highway shall be designated as scenic highways. This can be accomplished by retaining large acreages in Rural Residential, in Low Density Residential and Medium Density Residential and other areas by retaining landscaped pedestrian/bicycle pathways and limiting structures adjacent to the roadways to one story.

Page 73, Geothermal Element, Goal B

Add: 7. To preserve the operation of the tourist and other mineral water consuming sectors of the City's economy.

Add the following to the Land Use Element:

GOAL E The Calistoga Gliderport is an important asset to Calistoga and it is the City's goal to strive to keep it as a special use or private airport principally used for glider operations.

POLICIES

1. Project review shall assure that land use types and densities in areas adjacent to the Calistoga airport are compatible with airport activity so existing and future capabilities of the airport can be preserved.

2. Land use plans, regulations and other actions adhere, to the extent reasonable or practicable, to the land-use compatibility criteria of the Napa County Airport Land Use Commission, unless it is determined that an override is appropriate.

3. The conversion of city owned land and airport land within the approach to the airport should be avoided whenever possible, as these areas are, and will continue to be, impacted by frequent aircraft overflights. Residential uses and other noise-sensitive uses(ie., nursing homes, hospitals, schools, and amphitheaters) are considered inappropriate within the approach corridor. Maintaining this area in agricultural and open space uses is strongly recommended to minimize the potential for future land use conflicts.

4. Any new residential, noise sensitive uses, or other land uses or structures bringing large concentrations of people within five thousand feet of the airport runways will be subject to noise, safety and overflight impact review.

5. Building sites on the airport property should be clustered in areas outside the approach zone(and overflight zone) and set back as much as possible from the extended runway centerline and typical flight tracks.

IMPLEMENTATION

1. The City shall refer proposed projects which include requests for general or specific plan amendment, changes to the zoning ordinance, and changes to local building regulations to the Napa County Airport Land Use

Commission for determination of consistency with its policy plan prior to review by the appropriate City decision-making body.

2. Provide for an airport overlay or combining zoning district in the zoning code. The district shall include limitations on such issues as building coverage, employment density and other hazards, as well as provisions for site design criteria, dedication of aviation easements and deed restrictions, and noise insulation requirements.

Add the following to the Safety Element:

GOAL G: To Provide Appropriate Regulations of Land Use and Airport Operations to Ensure that the safety of airport operations and personnel and the general public and adjacent structures are protected.

Policies:

1. Building sites on the airport property should be clustered in areas outside the approach zone (and overflight zone) and set back as much as possible from the extended runway centerline and typical flight tracks.

2. All new residential, noise sensitive developments or significant expansions thereto located within 5,000 feet of the airstrip or under a overfly route shall be required to dedicate airport easements, deed restrictions or file buyer beware notifications to ensure that prospective buyers are aware of the airport's influence. The restrictions shall include the following as appropriate:

* A right-of-way for free and unobstructed passage of aircraft through the airspace over the property at any altitude above a surface specified in the easement (set in accordance with Federal Aviation Regulations Part 77)

* A right to subject the property to noise, vibration, fumes, dust, and fuel particle emissions associated with normal airport activity.

* A right to prohibit the erection or growth of any structure, tree or other object that would enter the acquired airspace.

* A right-of-entry onto the property, with appropriate advance notice, for the purpose of removing, marking or lighting any structure or other object that enters the acquired airspace.

* A right to prohibit electrical interference, glare, misleading light sources, visual impairments, and other hazards to aircraft from being created on the property.

3. No object or structure shall be permitted to be erected which, because of height or other factors, would result in an increase in the minimum ceiling or visibility criteria for an existing or proposed instrument approach procedure.

4. An object or structure which would penetrate a horizontal or conical surface as defined by the Napa Airport Land Use Commission, and would be 30 feet or less in height above ground shall be considered conditionally acceptable even if it exceeds the prescribed height limit. Appropriate marking and lighting may be conditions for acceptability.

Implementation:

1. An airport safety ordinance should be prepared to address height limitations, building locations, approach zone(s) and land use restrictions for the lands affected by the operation of the airport. Provisions of the ordinance also should require discretionary permits for any use or structure. Also any tree exceeding thirty feet above the natural terrain shall require review and approval by the Planning Commission.

2. The City shall manage its property located to the east of the airport such that no structures are constructed which would interfere with aircraft operations.

3. Any change in the length or location of runway use or conversion to a public use airport shall require safety studies to determine the measures needed to ensure safe airport operations and that adjacent land uses will not be adversely affected.

Add the following to the Noise Element, Goal B:

GOAL B

Policies:

4. A maximum exterior noise level of 55 to 60 Ldn is acceptable for residential uses next to the airport. Compatible noise levels for commercial uses are defined at

65-75 Ldn and between 70-80 Ldn for industrial uses. The Land Use/ Noise Compatibility Table () shall be used to determine acceptable noise levels for various land uses to be located on or adjacent to the airport.

5. The noise contour map illustrated as Exhibit 28 of the Master Environmental Assessment of the Calistoga General Plan is the maximum noise contours at peak operating conditions of the glider port. Any change in the length or location of runway use or conversion to a public use airport shall require studies to determine the new noise contours for the airport.

CITY OF CALISTOGA PLANNING COMMISSION
MINUTES SEPTEMBER 26, 1990

The City of Calistoga Planning Commission met in regular meeting at the Calistoga Community Center with Chairperson Frasca and Commissioners Atkinson, Dinsmoor, Hunter and Shaw in attendance. The meeting was called to order at 7:00 p.m. with Chairperson Frasca presiding.

APPROVAL OF MINUTES

It was moved by Commissioner Dinsmoor, seconded by Commissioner Atkinson and unanimously carried to approve the Minutes of August 22, 1990, as submitted.

It was moved by Commissioner Atkinson, seconded by Commissioner Dinsmoor and unanimously carried to approve the Minutes of September 12, 1990, as submitted.

GENERAL PLAN UPDATE VOLUME II - DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) VOLUME III (continued from September 12, 1990)

Richard Spitler, Contract Planning Director reviewed the General Plan Draft EIR process and briefly summarized his Staff Memorandum dated September 20, 1990, regarding the write up of changes made to the MEA (Volume I) and the Policy Plan (Volume II) of the General Plan, that represent the consensus of the Planning Commission at its September 12, 1990, meeting.

The Commission and Staff conducted a general discussion of the General Plan EIR. The following is a list of the minor changes the Commission agreed upon: minor clerical error on page 3 changing the zone designation from LDF to LDR; page 165, #81 (b), regarding the 50 foot minimum setback. 50 feet is too excessive and recommended 30 feet instead.

Letters were received from J. Paul Dumont and Gina Urbani. The following is the Commission's consensus regarding their requests: Mr. Dumont requests the language be less restrictive on page 33b, item F of the Policy Plan regarding his property, where it states that **related services must be clearly secondary to the transient lodging use.** The Commission agreed to leave the language unchanged.

COMMISSIONER FRASCA STEPPED DOWN DUE TO A POSSIBLE CONFLICT OF INTEREST.

Gina Urbani's letter, dated September 19, 1990, requested her property have a zoning designation of Commercial rather than the MDR-PD. The Commission concurred that they wanted to leave the property zoned MDR-PD.

COMMISSIONER FRASCA RETURNED TO HIS DUTIES AS A PLANNING COMMISSIONER.

It was moved by Commissioner Atkinson, seconded by Commissioner Shaw and unanimously carried to recommend to the City Council that the General Plan EIR is complete.

It was moved by Commissioner Dinsmoor, seconded by Commissioner Hunter to recommend that the City Council approve the General Plan Update, MEA, and Policy Plan, as amended, by the following roll call vote:

AYES: Commissioners Atkinson, Dinsmoor, Hunter, Shaw
and Chairperson Frasca

NOES: None

ABSENT/ABSTAIN: None

CITY COUNCIL ACTIONS

Staff gave a brief summary of the last City Council meeting.

ANNOUNCEMENTS/CORRESPONDENCE

Staff read a letter, dated September 26, 1990, from Dan Farris requesting that this meeting be continued to October 10, 1990, to address and make a decision regarding an urgent matter he wishes to bring before the Commission.

ADJOURNMENT

It was moved by Commissioner Shaw, seconded by Commissioner Hunter and unanimously carried at 8:10 p.m., to adjourn to the October 10, 1990.

Heidi Bumgarner, Secretary

APPROVED:

Sal Frasca, Chairperson

City Council
October 16, 1990

CITY OF CALISTOGA MEMORANDUM

TO: Honorable Mayor and
City Council

FROM: Richard Spitler,
Planning Director

RE: Planning Commission Report:
Calistoga General Plan Update

DATE: October 16, 1990

APPROVED BY:

DATE:

10/11/90

Natasha Merkuloff, City Administrator

Introduction:

The City Council directed city staff to prepare an update to the Calistoga General Plan. Staff prepared the plan and submitted it to the Planning Commission. After holding a public hearing and reviewing the City Council public hearing testimony (See Attached) the Planning Commission on September 26, 1990 adopted a recommendation to the City Council that the Final EIR is complete and that the General Plan update should be adopted. More specifically, the Planning Commission recommended that the following documents be adopted as the Calistoga General Plan:

1. General Plan Update Volume I, MEA and Issues and Options;
2. General Plan Update Volume II, Policy and Program Document;
3. General Plan Update Volume III, Environmental Impact Report;
4. Traffic Analysis Land-Use Options Assessment, General Plan Update, City of Calistoga, California, May 1990;
5. Traffic Analysis of Three Street Improvement Alternatives, City of Calistoga, March 1989;
6. Technical Supplement to the Noise Element of the City of Calistoga General Plan, October 1989 and Addendum, July 1990;
7. Seismic Safety Element of the County of Napa adopted by the Napa County Board of Supervisors June 1983 and amended October 1983, January 1984 and November 1986; and,

8. Land Use Diagram, a map delineating general plan land use designations for specific properties within the City Limits of the City of Calistoga.

Any of these documents not in your position can be reviewed at the City Clerk's Office.

The City Council has received a copy of the Final EIR and the Policy Plan as recommended by the Planning Commission. An errata sheet has been prepared for the Policy Plan and Final EIR and is attached to this report.

Planning Commission Recommendation:

The Planning Commission recommends that the City Council take the following actions:

1. Adopt the attached resolution certifying that the Final EIR is complete;
2. Adopt the attached resolution making certain findings as to the potential environmental impact of the Calistoga General Plan update; and
3. Adopt the attached resolution adopting the Calistoga General Plan Update 1990.

Respectfully submitted,



Calistoga Planning Commission

Attachments

MINUTES OF THE MEETING OF THE CALISTOGA CITY COUNCIL

OCTOBER 16, 1990

The meeting was called to order at 7:05pm by Mayor Jim Hughes. In addition to Mayor Hughes, also present were Councilmembers Oyarzo, Maxfield, Beck and Marberry, City Attorney Andrea Forest, Planning Consultant Richard Spitler, Interim Public Works Director John Smith, City Administrator Natasha Merkuloff, and Deputy City Clerk Patt Osborne. Councilmember Marberry requested Item C-17 be removed from the consent calendar for further discussion. Councilmember Beck requested Items C-1, 2, & 12 be removed from the consent calendar for further discussion. City Administrator Merkuloff requested Item C-19 be removed from the consent calendar for further discussion.

ORAL COMMUNICATIONS

Jack Gingles 1743 North Oak, stated he is in support of Agenda Item C-16, regarding Napa County Crisis Services in Calistoga.

Rudy Heuser 1300 Fairway, stated that work on his sewer and water extension across HWY 128 is complete.

Jim Ford 493 Franklin, Napa spoke against the 20/20 Initiative (Measure J).

Judy Jones 63 Brannan Street, expressed concerns regarding the City changing to contract police services.

Jeff Bounsell 414 Foothill Blvd expressed this concern regarding the 60/40 water split. Mr. Bounsell stated he would like to see commercial receive the 60% of the city's available water rather than residential. In fact this would be more beneficial, economically for the City as a whole.

Councilmember Beck requested that the three members who voted not to pay the PG&E bill, reconsider, as he would not like the City in the position of saying "tough luck". Councilmember Oyarzo stated that this was not the intent, but to investigate carefully so that we know the bill is truly the City's bill.

Mayor Hughes expressed appreciation from the City of Calistoga to members of the Housing Rehabilitation Loan Committee for their services to the City.

City Administrator Merkuloff stated that grant monies given the City (from the State) for flood damages in 1986 were still being questioned. Counties have been informed that the flood fund monies had been spent inappropriately. Representatives will be going to Sacramento on November 21, 1990 in a collective appeal pointing to a lack of clear instruction from the State on the spending of these monies.

CONSENT CALENDAR

It was moved by Councilmember Maxfield, seconded by Councilmember Marberry and unanimously carried to adopt the following items:

- 3) Payroll for the period ending October 15, 1990.
- 4) Reject claim of Judy Avey.
- 5) Reject claim of Julie Ward.
- 6) Agreement between City and County of Napa regarding reallocation of Parklands Act Grant Funds for improvements to the Calistoga Community Center.
- 7) Contract between City of St. Helena and City of Calistoga for expanded 911 service despatch for the year 1989-90.
- 8) Resolution in support of Napa River Flood Project and uniform definition for hazardous/contaminated waste.
- 9) Resolution in support of improvements at the Kelly Road and Highway 12 intersection.
- 10) Resolution in support of signalization and other improvements at the intersection of Petrified Forest Road and Highway 128, and request county-wide assistance.
- 11) Accept donation of \$1,000 to the Calistoga 1990-91 youth basketball program by Calistoga Athletic Boosters.
- 13) Resolution granting exception of minimum lot width required by Dan Farris, LL 90-3.
- 14) Request for proposals for City Attorney Services, informational item only.
- 15) Resolution authorizing application for funding from California Department of Water Resources for Water Main Upgrade Project.
- 16) Napa County Crises Services in Calistoga, informational item only.
- 18) Commencement of Sewer Treatment Plant Improvements, informational item only.

Councilmember Beck stated he would abstain from voting on the minutes of October 1, 1990 as he was absent from that meeting. It was moved by Councilmember Marberry, seconded by Councilmember Maxfield to approve C-1, minutes of October 1, 1990. The motion was passed by the following roll call vote: AYES: Councilmembers Marberry, Maxfield, Oyarzo and Mayor Hughes; NOES: None; ABSTAIN: Councilmember Beck.

Councilmember Beck stated he would abstain from voting on the accounts payable for the period ending October 1, 1990 as he was absent from that meeting. It was moved by Councilmember Marberry, seconded by Councilmember Maxfield to approve C-2, accounts payable for the period ending October 1, 1990. The motion was passed by the following roll call vote: AYES: Councilmembers Marberry, Maxfield, Oyarzo and Mayor Hughes; NOES: None; ABSTAIN: Councilmember Beck.

PARKING ENFORCEMENT PROGRAM APPROVED FOR ONE YEAR TRIAL PERIOD

Councilmember Beck stated he was in opposition to the Parking Enforcement Program due to the following: 1) additional costs, 2) uniforms giving a wrong impression of seniors being law enforcement officers, 3) possible problems relating to the hiring of senior citizens, such as pre-existing health problems, 4) no real major parking problems.

Councilmember Oyarzo stated that all candidates will be required to successfully complete a medical and psychological examination, and that some of the people will volunteer their time which will cut cost.

Councilmember Maxfield stated that a survey had been done for a period of 35 days to evaluate the parking situation. There were often 26 parking spaces available at any one given time. Councilmember Maxfield stated that he would support the Parking Enforcement Program if the need was proven.

Councilmember Oyarzo felt that this survey was done during September and October, after peak season. Mayor Hughes stated this was a pilot program and would answer questions as to whether a need existed or not.

It was moved by Councilmember Marberry, seconded by Councilmember Oyarzo to approve C-12, commence the Parking Enforcement Program as of January 1, 1991 for a one year trial period. The motion passed by the following roll call vote: AYES: Councilmembers Marberry, Oyarzo and Mayor Hughes; NOES: Councilmembers Maxfield and Beck; ABSENT/ABSTAIN: None.

SPITLER SERVICE AGREEMENT APPROVED

Councilmember Marberry questioned the amounts listed in the agreement with Mr. Spitler for continued services. Ms. Forest responded to Mr. Marberry's question. A refined copy of the letter of understanding will be presented to the Council. It was moved by Councilmember Marberry, seconded Councilmember Maxfield to approve C-17, authorize City Administrator to execute the letter of understanding for continued services from Richard Spitler as a City Consultant Planner for a sum not to exceed \$10,000. The motion passed by the following roll call vote: AYES: Councilmembers Marberry, Maxfield, Oyarzo, Beck and Mayor Hughes; NOES: None; ABSTAIN/ABSENT: None.

COUNCIL APPROVED PIPE RENTAL

City Administrator Merkloff reviewed the need for a pipe and pump in the event of a break in the NBA pipeline. It was moved by Councilmember Marberry, seconded by Councilmember Oyarzo to approve C-19, rental of the pipe in an amount not to exceed \$10,735.74 and return to Council with additional information regarding the rental/purchase of the pump.

The motion passed by the following roll call vote: AYES: Councilmembers Marberry, Oyarzo, Maxfield, Beck and Mayor Hughes; NOES: None, ABSTAIN/ABSENT: None.

PUBLIC APPEARANCE

Diane Dillon 1750 Hill View Place, St. Helena spoke supporting the 20/20 Initiative (Measure J) and the "support of open space". Ms. Dillon requested Council approve resolution supporting the 20/20 Initiative.

Councilmember Maxfield stated that previous Council had voted for this concept then rescinded the vote. It was moved by Councilmember Marberry, seconded by Councilmember Oyarzo to adopt resolution supporting the passage of the 20/20 Initiative petition (ballot Measure J) in Napa County. The motion passed by the following roll call vote: AYES: Councilmembers Marberry, Oyarzo, Beck and Mayor Hughes; NOES: Councilmember Maxfield; ABSENT/ABSTAIN: None.

PUBLIC HEARING

SEWER WATER ADVISORY COMMISSION (SWAC) TO REVIEW COMMENTS AND RETURN TO COUNCIL WITH REVISIONS

The Mayor called three times for comments both in favor and opposed to adopting the Resource Management System (RMS) update.

The following people spoke in opposition of adopting the RMS:

Lou Wuertele 1801 Fisher Avenue, stated he would like the RMS to define the word dwelling, to specify water needs for Group III, and to not calculate the baseline on a yearly basis.

Tom Redmond 1747 North Oak Street, stated he would like to see a percentage of the building permit fee retained for administrative cost in the event of a cancellation or rejection of that permit.

No one spoke in favor of adopting the RMS

Mayor Hughes closed the Public Hearing

Councilmember Beck discussed his areas of concern regarding the RMS.

Planning Consultant Richard Spitler addressed Messrs. Wuertele's, Redmond's and Beck's concerns. Mr. Spitler stated that with Council direction he would present the concerns expressed to SWAC for comments.

It was moved by Councilmember Marberry, seconded by Councilmember Oyarzo establishing a Resource Management System within the City of Calistoga and amending and deleting other sections of the code to be consistent with the System and repealing Ordinance number 401. The motion failed by the following roll call vote: AYES:

Councilmembers Marberry and Oyarzo; NOES: Councilmembers Maxfield and Beck; ABSTAIN: Mayor Hughes.

It was moved by Mayor Hughes, seconded by Councilmember Maxfield to submit to SWAC Council's concerns and in turn SWAC to return to Council with revisions. The motion passed by the following roll call vote: AYES: Mayor Hughes, Councilmembers Maxfield, Beck and Oyarzo; NOES: None; ABSTAIN: Councilmember Marberry.

RESOLUTION ADOPTED CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT (EIR).

Councilmembers Maxfield, Beck and Mayor Hughes declared they may have a conflict of interest in voting on the General Plan, and disqualified themselves.

This disqualification led to a lack of quorum of the Council. To create a quorum so that a decision may be reached, the disqualified members used a random means to determine which of them would be reinstated in order to create a quorum. Councilmember Beck's name was drawn. Once reinstated Councilmember Beck described fully the nature of his financial interest. Further he declared why there was no alternative source of decision making. He was advised by the City Attorney that he may partake in the discussion and in the vote, pursuant to information received from the Fair Political Practices Commission this afternoon.

The seated members of the Council discussed the General Plan Update.

It was moved by Councilmember Marberry, seconded by Councilmember Beck to adopt resolution certifying a final Environmental Impact Report (EIR) for the City of Calistoga General Plan Update. The motion passed by the following roll call vote: AYES: Councilmembers Marberry, Beck, and Mayor Pro-Tem Oyarzo; NOES: None; ABSTAIN: Councilmember Maxfield and Mayor Hughes.

RESOLUTION ADOPTED MAKING CERTAIN FINDINGS AS TO THE POTENTIAL ENVIRONMENTAL IMPACT OF THE CALISTOGA GENERAL PLAN UPDATE.

It was moved by Councilmember Marberry, seconded by Mayor Pro-Tem Oyarzo to adopt resolution making certain findings required by the California Environmental Quality Act pertaining to the City of Calistoga General Plan Update for which an Environmental Impact Report has been prepared. The motion passed by the following roll call vote: AYES: Councilmember Marberry, Mayor Pro-Tem Oyarzo and Councilmember Beck; NOES: None; ABSTAIN: Councilmember Maxfield and Mayor Hughes.

RESOLUTION ADOPTED ADOPTING THE CALISTOGA GENERAL PLAN

After some discussion Councilmember Beck agreed to support the resolution with the following two changes: 1) re-define "fast food", 2) change the FAR for commercial in downtown area to 2.0.

It was moved by Councilmember Marberry, seconded by Mayor Pro-Tem Oyarzo to adopt resolution adopting the Calistoga General Plan Update 1990 with two revisions.

COUNCIL INTRODUCES ORDINANCE NOTIFYING PROPERTY OWNERS OF THEIR LIABILITY FOR SIDEWALK INJURIES.

It was moved by Councilmember Marberry, seconded by Councilmember Oyarzo to adopt ordinance adding Chapter 12.10 to the Calistoga Municipal Code and to clarify duty to public and property owner to maintain sidewalk areas and parkstrips in nondangerous condition. The motion passed by the following roll call vote: AYES: Councilmembers Marberry, Oyarzo, Maxfield, Beck and Mayor Hughes.

It was moved by Councilmember Marberry, seconded by Councilmember Maxfield and unanimously carried to waive the reading of the preceding ordinance in its entirety.

COUNCIL DIRECTS STAFF TO AMEND ADVISORY BODY RESOLUTION AND RETURN TO COUNCIL.

COUNCIL DIRECTS STAFF TO SCHEDULE FUTURE 1990 MEETINGS AS FOLLOWS: MONDAY OCTOBER 29TH, MONDAY NOVEMBER 5TH, TUESDAY NOVEMBER 20TH, AND TUESDAY DECEMBER 11TH.

COUNCIL AUTHORIZES HIRING OF NEW PUBLIC WORKS DIRECTOR/CITY ENGINEER.

It was moved by Councilmember Marberry, seconded by Councilmember Oyarzo to appoint Waldo Kolb, Public Works Director/City Engineer for the City of Calistoga commencing November 1, 1990. The motion was passed by the following roll call vote: AYES: Councilmembers Marberry, Oyarzo, Beck, Maxfield and Mayor Hughes; NOES: None; ABSENT/ABSTAIN: None

COUNCIL DIRECTS STAFF TO RESPOND TO MR. RUDY HEUSER'S LETTER.

It was Council consensus that City Administrator Natasha Merkulooff respond to a letter dated October 9, 1990 from Mr. Heuser posing four questions having to do with the planning moratorium previously approved by Council.

CLOSED SESSION

Council action from closed session: reject claim of Marion Sherry.

ADJOURNMENT

It was moved by Councilmember Marberry, seconded by Councilmember Maxfield and unanimously carried to adjourn at 11:00pm.

Respectfully submitted,

PATT OSEORNE, Deputy City Clerk

APPROVED

JIM HUGHES, Mayor

IV. NOTICE OF COMPLETION

CITY OF CALISTOGA

In Beautiful



Napa Valley

1232 WASHINGTON STREET • CALISTOGA, CALIFORNIA 94515 • (707) 942-5188

NOTICE OF COMPLETION

State of California
Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814

General Plan Update

Project title

Northern Portion of Napa Valley

Project Location - Region

Calistoga

Project Location - City

Napa

Project Location - County

Description of Nature, Purpose, and Beneficiaries of Project

The project is of a General Plan Update consisting of revisions to Land Use, Circulation, Housing, Conservation, Open Space, Safety, Noise, and Geothermal Elements.

City of Calistoga

Lead Agency

Planning Department

Division

1232 Washington Street, Calistoga, CA 94515, 1108 Myrtle Street, Calistoga, CA 94515
EIR Reviewing Location(s)

Forty-five (45) days, from August 3, 1990 to September 17, 1990

Review Period

Richard Spitler, Acting Planning Director

Contact Person

(707) 942-5188

Area Code/Phone/Extension

FILED AND POSTED BY

13 1990

Project Title: CALISTOGA GENERAL PLAN UPDATELead Agency: CITY OF CALISTOGAContact Person: JO NOBLEStreet Address: 1232 WASHINGTON STREETPhone: (707) 942-5188City: CALISTOGA, CAZip: 94515County: NAPA

Project Location

County: NAPACity/Nearest Community: CALISTOGACross Streets: STATE HIGHWAY 29 & 128Total Acres: 1600

Assessor's Parcel No. _____

Section: 1 Twp. T8NRange: R7W Base: CALISTOGAWithin 2 Miles: State Hwy #: 29Waterways: NAPA RIVERAirports: CALISTOGARailways: NONESchools: CALISTOGA ELEMENTARY
CALISTOGA HIGH SCHOOL

Document Type

CEQA:

☐ NOP☐ Early Cons☐ Neg Dec☒ Draft EIR☐ Supplement/Subsequent☐ EIR (Prior SCH No.) _____☐ Other _____

NEPA:

☐ NOI☐ EA☐ Draft EIS☐ FONSI

Other:

☐ Joint Document☐ Final Document☐ Other _____

Local Action Type

☒ General Plan Update☐ General Plan Amendment☐ General Plan Element☐ Community Plan☐ Specific Plan☐ Master Plan☐ Planned Unit Development☐ Site Plan☐ Rezone☐ Prezone☐ Use Permit☐ Land Division (Subdivision,
Parcel Map, Tract Map, etc.)☐ Annexation☐ Redevelopment☐ Coastal Permit☐ Other _____

Development Type

☐ Residential: Units _____ Acres _____☐ Office: Sq.ft. _____ Acres _____ Employees _____☐ Commercial: Sq.ft. _____ Acres _____ Employees _____☐ Industrial: Sq.ft. _____ Acres _____ Employees _____☐ Educational _____☐ Recreational _____☐ Water Facilities: Type _____ MGD _____☐ Transportation: Type _____☐ Mining: Mineral _____☐ Power: Type _____ Watts _____☐ Waste Treatment: Type _____☐ Hazardous Waste: Type _____☐ Other _____

Project Issues Discussed in Document

☒ Aesthetic/Visual☒ Agricultural Land☒ Air Quality☒ Archeological/Historical☐ Coastal Zone☒ Drainage/Absorption☒ Economic/Jobs☐ Fiscal☒ Flood Plain/Flooding☒ Forest Land/Fire Hazard☒ Geologic/Seismic☒ Minerals☒ Noise☒ Population/Housing Balance☒ Public Services/Facilities☒ Recreation/Parks☒ Schools/Universities☐ Septic Systems☒ Sewer Capacity☒ Soil Erosion/Compaction/Grading☒ Solid Waste☒ Toxic/Hazardous☒ Traffic/Circulation☒ Vegetation☒ Water Quality☒ Water Supply/Groundwater☒ Wetland/Riparian☒ Wildlife☒ Growth Inducing☒ Landuse☒ Cumulative Effects☐ Other _____

Present Land Use/Zoning/General Plan Use

Project Description

UPDATE OF THE CALISTOGA GENERAL PLAN
ADDRESSING THE ENTIRE CITY LIMITS.

NOTE Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. from a Notice of Preparation or previous draft document) please fill it in.

Revised October 198

V. DRAFT ENVIRONMENTAL IMPACT REPORT

CITY OF CALISTOGA
ADMINISTRATIVE DRAFT
GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT

PREPARED FOR:

RICHARD SPITLER
PLANNING DIRECTOR
CITY OF CALISTOGA
1232 WASHINGTON STREET
CALISTOGA, CALIFORNIA 94515

PREPARED BY:

STA PLANNING, INC.
250 MONTGOMERY STREET, SUITE 1000
SAN FRANCISCO, CALIFORNIA 94104

JULY 27, 1990

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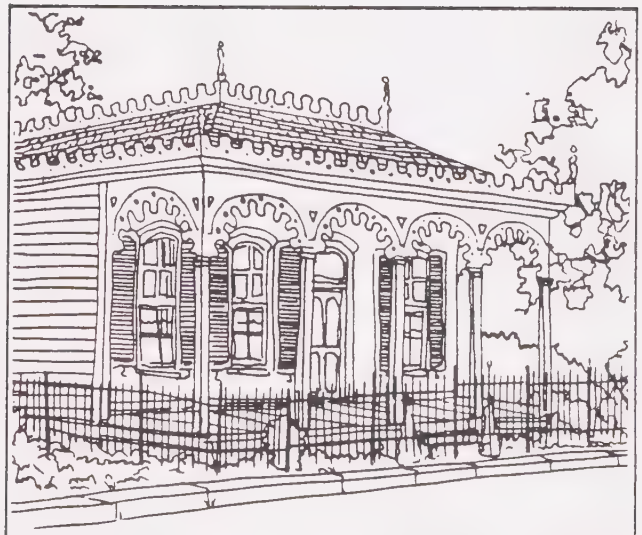
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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

INTRODUCTION

This Environmental Impact Report analyzes the potential environmental impacts of the proposed update of the City of Calistoga General Plan adopted on March 15, 1977. The General Plan Update involves the revision of the following elements: Land Use Element; Circulation Element; Housing Element; Conservation Element; Open Space Element; Safety Element; Noise Element; and the Geothermal Element.

The objective of this EIR is to serve as an informational document to be utilized by the City of Calistoga in considering proposed future development within the City of Calistoga's Study Area. The preparation of the EIR is under the supervision of the City of Calistoga Planning Director. The lead agency responsible for approval of the project and certification of the EIR is the City of Calistoga.

The project history and previous environmental documentation of the project are discussed in the Project Description section of this report.

The City of Calistoga is located in the extreme northern end of the Napa Valley, 27 miles north of Napa, twenty miles north of Santa Rosa, and 74 miles northeast of San Francisco. The Study Area for the General Plan update consists of approximately 3.43 square miles or 2,200 acres, of which approximately 2.5 square miles or 1,600 acres are within the City limits.

The EIR will be a Program EIR and part of a tiering process as defined in CEQA Guidelines Section 15152. Tiering is an effort to focus on the environmental issues which are relevant to the approval being considered. It is anticipated that future approvals related to the proposed General Plan will be able to utilize the information set forth in this Initial Study and EIR. Since a general plan and its elements are comprehensive and general, the proper level of environmental analysis is also general. As specific components of the revised General Plan are proposed, more specific environmental analysis will be prepared. Any deferred mitigation will be included in later project-specific environmental analyses.

PROJECT ENVIRONMENTAL SUMMARY

This Environmental Impact Report (EIR) evaluates the project's potential project-specific and cumulative impacts regarding land use, population, housing, traffic and circulation, air quality, noise, biological resources, and public services and utilities. The General Summary section of this EIR provides a summary of potential impacts, mitigation measures, and

levels of significance. Impacts that have been addressed and the mitigation measures recommended in this EIR follow.

Land Use

The adoption of new land use designations is considered an insignificant impact. Conversions of agricultural uses to residential uses are also considered insignificant impacts.

Impacts mitigated to a level of insignificance include compatibility impacts with commercial and residential uses and zoning code changes needed to achieve consistency between it and the General Plan.

No project-specific or cumulative unavoidable, significant impacts have been identified.

Population

The addition of population is not a significant impact. Indirect project-specific and cumulative impacts of population growth on traffic, noise, air quality, housing and public services and utilities are discussed in their respective sections of this EIR.

Housing

No insignificant project-specific impacts have been identified. The following impacts have been identified that can be mitigated to a level of insignificance: existing infrastructure constraints may impact the City's ability to meet its fair share housing allocations for 1990-1995; the potential for a jobs/housing imbalance; and the availability of affordable housing for low and moderate income households. Through implementation of the mitigation measures related to housing, the project will not contribute to a cumulative jobs/housing imbalance on a regional level.

Traffic and Circulation

Impacts identified as insignificant include public transportation and air transportation.

Impacts mitigated to a level of insignificance include those project-specific effects related to vehicular transportation, bicycle, and pedestrian activities.

Impacts partially mitigated but remaining significant include parking demand. Impacts to parking will be further addressed in site-specific analysis.

The project, in conjunction with other past, present, and reasonably foreseeable regional projects will add incrementally to traffic and circulation congestion. This impact can be partially mitigated but remains significant.

Air Quality

Implementation of the mitigation measures listed in the Air Quality section of this report will reduce the project-specific short-term and long-term impacts to a level of insignificance.

The project in conjunction with other past, present, and reasonably foreseeable future projects, will incrementally contribute to long-term impacts on air quality. The project's contribution to this cumulative impact can be partially mitigated but remains significant.

Noise

The Calistoga Soaring Center and the wind machines are expected to have insignificant noise impacts upon implementation of the General Plan.

Implementation of the mitigation measures will partially mitigate roadway noise impacts along Silverado Trail, Washington Street, Lake Street, and Berry Street and noise impacts from the sprint car races. These impacts remain significant after mitigation.

Upon the implementation of programmatic mitigation, incremental cumulative impacts are not expected to be significant.

Biological Resources

Impacts found to be insignificant include minor disturbances to the Calistoga Popcorn flower and Napa bluegrass.

Impacts mitigated to a level of insignificance include disturbances to peregrine and prairie falcons, loss of native vegetation, impacts to wildlife species and impacts to the Napa River, Blossom, Garnett, and Cyrus Creeks, and other waterways.

Significant impacts partially mitigated by the implementation of mitigation measures listed in the Biological Resources section of this report include: disturbances to vegetation on Mt. Washington, wetlands, marshlands near the geyser, small wetlands on spa properties, and wetland sinks near Mt. Washington. Further analysis of these impacts will be addressed during site-specific review.

The project in combination with other past, present, and reasonably foreseeable projects in the region will have a cumulative impact on biological resources. This impact can be partially mitigated but remains significant.

Public Services and Utilities

Insignificant impacts of the proposed project are those related to the provision of gas, electrical, and telephone service. PG&E and Pacific Bell will review specific development plans as they are proposed.

Significant impacts mitigated to a level of insignificance include the following public services and utilities: impacts to 1) fire protection, 2) police protection, 3) water, 4) wastewater, 5) storm drainage, 6) solid waste, 7) schools, 8) library, 9) parks, 10) gas, 11) electric, 12) other services.

No unavoidable significant project-specific or cumulative impacts to Public Services and Utilities have been identified.

ALTERNATIVES

Alternatives to the proposed project are listed below and are evaluated in this EIR. The Alternative section provides a descriptive analysis and evaluation of each alternative. In addition, the Alternatives Summary displays a comparison of each alternatives' potential environmental impact in comparison to the proposed project.

- No Project Alternatives
 - No Development
 - Development Under the Existing General Plan
 - Alternative Location
- Low Density/Intensity Alternative
- High Density/Intensity Alternative

LONG-TERM IMPLICATIONS OF THE PROJECT

Long-term impacts resulting from implementation of the General Plan Update include moderate urbanization, decreases in biological habitat and species diversity, a decrease in open space, an increase in demand for circulation and roadway improvements, an increase in demand on infrastructure and facilities to provide community services and public utilities, an increase in ambient noise levels, and an increase in air pollutant emissions.

Implementation of the General Plan Update will provide for new growth and may increase the desirability of new development and stimulate the occurrence of unplanned growth.

AREAS OF CONTROVERSY

No areas of controversy were identified by preliminary comments from public agencies and members of the public. Areas of controversy may arise during the public hearing.

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
LAND USE	The change in land use designation from agricultural to Rural Residential and Medium Density Residential uses is not considered a significant impact.	Project	None Required	Insignificant Impact
	The change from agricultural to residential uses is not considered a significant land use impact.	Project	None Required	Insignificant Impact
	Adjacent land use designations in unincorporated County of Napa are considered compatible.	Project	None Required	Insignificant Impact

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
	The incompatibility of adjacent commercial and residential land use can be mitigated to a level of insignificance.	Project	Refer to Mitigation Measures 1-12 in the Land Use section.	Mitigated to a Level of Insignificance.
	The General Plan will have an impact on the Zoning Code.	Project	Refer to Mitigation Measures 1-3, 6, 10 in the Land Use section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan will have an impact on the Resource Management System of the City of Calistoga.	Project	Refer to Mitigation Measure 13 in the Land Use section.	Mitigated to a Level of Insignificance.

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
	Implementation of the General Plan may create land use impacts by initiating or expanding upon plans and programs that relate to land use, including an Urban Design Study, Construction of Public Facilities, Hillside Management Ordinance, and designation of a scenic highway corridor.	General Plan is not Project	Refer to Mitigation Measures 14-26 in the Land Use section.	Mitigated to a Level of Insignificance.
POPULATION	The population growth that results from the implementation of the	Project	None Required	Insignificant Impact

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
	not considered a significant impact.			
HOUSING	Existing infrastructure constraints, may impact the City's ability to meet its fair share housing allocations for 1990-1995.	Project	Refer to Mitigation Measures 27-59 in the Housing section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan may impact the availability of dwelling units for future employees, creating a project-specific and cumulative jobs/housing imbalance.	Project and Cumulative	Refer to Mitigation Measures 27-59 in the Housing section.	Mitigated to a Level of Insignificance.

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
	Implementation of the General Plan may impact the availability of affordable housing for low and moderate income households, affecting in particular, special needs groups such as the elderly, farmworkers, the handicapped, large families, and single-parent households.	Project	Refer to Mitigation Measures 27-59 in the Housing section.	Mitigated to a Level of Insignificance.
TRAFFIC AND CIRCULATION	Implementation of the General Plan will not significantly impact public transportation.	Project	None Required	Insignificant Impact

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
	Implementation of the General Plan will not significantly impact air transportation.	Project	None Required	Insignificant Impact
	Implementation of the General Plan will impact traffic volume and levels of service.	Project	Refer to Mitigation Measures 60-64 in the Traffic and Circulation section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan will impact bicycle and pedestrian facilities.	Project	Refer to Mitigation Measures 65,66 in the Traffic and Circulation section.	Mitigated to a Level of Insignificance.
	Implementation of the proposed project will impact the current parking	Project	Refer to Mitigation Measures 67,68 in the Traffic and Circulation section.	Significant impacts that can be partially mitigated.

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
	shortfall by increasing parking demand.			
	Implementation of the General Plan, in conjunction with other past, present, and reasonably foreseeable/future projects will have a cumulative impact on regional traffic and circulation.	Cumulative	Refer to Mitigation Measures 60-68 in the Traffic and Circulation section.	Significant impact that can be partially mitigated.
AIR QUALITY	Project construction activities will temporarily impact air quality.	Project	Refer to Mitigation Measure 70 in the Air Quality section.	Mitigated to a Level of Insignificance.

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
	Implementation of the General Plan will have a long-term impact on pollutant emissions.	Project	Refer to Mitigation Measures 69,70 in the Air Quality section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan, in conjunction with other General Plans within the Bay Area Air Quality Management District, will have a cumulative impact on air quality in the region.	Cumulative	Refer to Mitigation Measures 69-71 in the Air Quality section.	Significant impact that can be partially mitigated.
	Noise levels from the Soaring Center are within typical	Project	None Required	Insignificant Impact

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
	noise standards and are not considered a significant impact.			
	Wind machine noise will be exposed to a greater number of people, but will be offset by a reduction of agricultural operation, and therefore, is not considered a significant impact.	Project	None Required	Insignificant Impact
	Implementation of the General Plan, in conjunction with past, present, and reasonably foreseeable future projects, will have an	Cumulative	Refer to Mitigation Measures 72-79 in the Noise section.	Mitigated to a Level of Insignificance.

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
	incremental insignificant impact.			
	Future project developments will result in significant roadway impacts on Silverado Trail, Washington Street, Lake Street, and Berry Street.	Project	Refer to Mitigation Measures 72-77, 79 in the Noise section.	Significant impact that can be partially mitigated.
	Noise impacts as a result of sprint car races at the Napa County Fairgrounds are expected to result in significant impacts.	Project	Refer to Mitigation Measures 72,73 in the Noise section.	Significant impact that can be partially mitigated.

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
BIOLOGICAL RESOURCES	Implementation of the General Plan will not significantly impact the Calistoga popcorn flower Napa bluegrass.	Project	None Required	Insignificant Impact
	Development according to proposed land use designations may impact native and riparian vegetation.	Project	Refer to Mitigation Measures 80-88 in the Biological Resources section.	Mitigated to a Level of Insignificance.
	Destruction of any riparian or woodland habitats will significantly impact wildlife species.	Project	Refer to Mitigation Measures 80-88 in the Biological Resources section.	Mitigated to a Level of Insignificance.

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
	Destruction of habitats along waterways will potentially impact the peregrine falcon and prairie falcon, both of which are listed as "endangered" by the state and/or federal agencies.	Project	Refer to Mitigation Measures 80, 81, 83, 84, 86 in the Biological Resources section.	Mitigated to a Level of Insignificance.
	Buildout of the proposed project, in conjunction with past, present, and reasonably foreseeable development, will have a cumulative impact on native vegetation, wildlife, and threatened and endangered species.	Cumulative	Refer to Mitigation Measures 80-88 in the Biological Resources section.	Significant impact that can be partially mitigated.

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
PUBLIC SERVICES AND UTILITIES	Implementation of the General Plan will not significantly impact gas, electric, and telephone service.	Project	None Required	Insignificant
	Implementation of the General Plan will not result in a significant cumulative impact on public services and utilities.	Cumulative	None Required	Insignificant
	Implementation of the General Plan will impact the ability of fire service staff and facilities to meet demands on fire protection.	Project	Refer to Mitigation Measures 91, 92, 105, 106, 109, 110 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
	Implementation of the General Plan will impact the ability of the police staff and facilities to meet demands for police protection.	Project	Refer to Mitigation Measures 91, 92, 109, 110 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan will impact the supply of water for the City.	Project	Refer to Mitigation Measures 89, 90, 92-99, 102-104, 109 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan will impact the level of service and infrastructure for wastewater services.	Project	Refer to Mitigation Measures 89, 90, 92-94, 96, 100, 101, 109 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
	Implementation of the General Plan will impact the City's storm drain system.	Project	Refer to Mitigation Measures 96, 109 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan will impact solid waste services if the proposed expansion of the Cloverflat landfill is not approved.	Project	Refer to Mitigation Measure 111 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan will impact the Calistoga School District as a result of increased enrollment due to population growth.	Project	Refer to Mitigation Measures 91, 92, 110 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.

PROJECT SUMMARY

RESOURCE	DESCRIPTION OF IMPACT	SCOPE	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE
	Implementation of the General Plan will impact library services provided by Napa City/County Library.	Project	Refer to Mitigation Measure 91 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan will impact the ability of existing parkland to meet future park use demand.	Project	Refer to Mitigation Measures 91, 92, 107, 108 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.
	Implementation of the proposed project will impact administrative services and Community Center Facilities.	Project	Refer to Mitigation Measures 91, 92, 110 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.

ALTERNATIVE SUMMARY MATRIX

CATEGORY OF IMPACT	NO PROJECT ALTERNATIVE			LOW DENSITY/INTENSITY ALTERNATIVE	HIGH DENSITY/INTENSITY ALTERNATIVE
	No Development	Development Under Existing General Plan	Alternative Location ¹		
Land Use	Less	Similar		Similar	Greater
Population	Less	Less		Less	Greater
Housing	Greater	Greater		Greater	Greater
Traffic and Circulation	Less	Greater		Less	Greater
Air Quality	Similar	Greater		Less	Greater
Noise	Less	Similar		Similar	Greater
Biological Resources	Less	Similar		Similar	Greater
Public Services and Utilities	Less	Less		Less	Greater
Environmentally Superior to Project	Yes	No	No	Yes	No
Remain Under Consideration	No	Yes	No	Yes	No

Source: STA Planning, Inc.

Notes: Greater: Impacts are expected to be greater than the proposed project.
Less: Impacts are expected to be less than the proposed project.
Similar: Impacts are expected to be similar to the proposed project.

¹ This alternative was rejected prior to expanded environmental analysis. Refer to text for a discussion on the rejection of this alternative.

INTRODUCTION

GENERAL PURPOSE/SCOPE OF ENVIRONMENTAL REVIEW

This Environmental Impact Report (EIR) addresses the potential environmental impacts of the City of Calistoga General Plan Update. The City is updating the 1977 General Plan. The buildout year for the proposed General Plan is 2010.

The project applicant is the City of Calistoga. The project applicant is seeking the approval of the General Plan for the City of Calistoga, certification of the Environmental Impact Report and its associated technical studies. Approvals required from responsible and trustee agencies are listed in the Project Description section of this EIR.

This EIR provides an overall analysis of potential impacts associated with implementation of the proposed project. The issues discussed within the EIR are those that have been identified in the course of extensive review of all potentially significant environmental impacts associated with the proposed project. This review included the preparation and issuance of a Notice of Preparation (Appendix A) and circulation of a Draft EIR.

ENVIRONMENTAL PROCEDURES

This EIR has been prepared in accordance with the California Environmental Quality Act of 1970 (CEQA), as amended (Public Resources Code, Section 21000, et seq.) and the State Guidelines for Implementation of the California Environmental Quality Act of 1970, as amended (California Administrative Code Section 15000, et seq.). This report complies with the rules, regulations, and procedures for implementation of the California Environmental Quality Act adopted by the City of Calistoga.

This EIR analyzes and assesses the significant environmental impacts of the proposed project. The EIR indicates the cumulative impacts of development coupled with past, present, and reasonably foreseeable development in surrounding areas. The EIR also identifies alternatives to the proposed project and discusses possible ways to reduce or avoid significant environmental impacts.

This EIR, as a final document pursuant to Sections 15089 and 15132 of the State CEQA Guidelines, will serve as the environmental informational document for all public and private activities and undertakings pursuant to or in furtherance of completion of the project. The City of Calistoga Planning Commission as advisory body, and the City of Calistoga City Council as decisionmaking body, will consider the information in this document in the course of their deliberations and decisionmaking.

PROJECT SPONSOR AND CONTACT PERSONS

The Lead Agency in preparing this EIR is the City of Calistoga Planning Department. The environmental consultant to the City is STA Planning, Inc. (STA) of San Francisco, California. Preparers and Contributors are listed in the Report Preparation Resources section of this EIR. Key contact persons are as follows:

City of Calistoga - Lead Agency/Project Applicant:

Richard Spitler
Acting Planning Director
Department of Planning
1232 Washington Street
Calistoga, CA 94515
(707) 942-5188

City Environmental Consultant:

STA Planning, Inc. (STA)
Fred Talarico
Principal
Jaime C. Maldonado
Project Director
150 Post Street, Suite 630
San Francisco, CA 94108
(415) 296-7760

EIR FORMAT AND ORGANIZATION

This report is organized to facilitate a basic understanding of the existing setting and environmental implications of the proposed project.

The Project Summaries section presents an Executive Summary of the EIR; a Project Summary/Matrix of impacts, recommended mitigation measures, and the level of significance after mitigation; and an Alternatives Summary Matrix.

The Introduction section discusses procedural matters, document format and organization, and project sponsors and contact persons.

The Project Description includes a description of the project location and vicinity. This section also identifies the applicant's objectives, project characteristics, and required discretionary actions.

The Regional and Local Setting section provides a general understanding of the regional and local setting in which the project will occur.

The Environmental Analysis section presents the disclosure of environmental effects as mandated by CEQA. Each environmental issue evaluated is examined individually. Impacts, recommended mitigation measures, and the levels of significance after mitigation are identified for each issue.

The Alternatives section examines a variety of suggested project alternatives as well as options currently under consideration or which may conceivably reduce the project's environmental impacts. These include the No Project Alternative, the Low Density/Intensity Alternative, and the High Density/Intensity Alternative.

The Long-Term Implications section describes long-term implications of the proposed project, including discussions on growth-inducing impacts, the relationship between short-term uses and long-term productivity, and irreversible environmental changes.

The Environmental Summaries section summarizes Impacts Not Found to be Significant, Impacts Mitigated to a Level of Insignificance, Unavoidable Adverse Impacts, Applicable City Policies and Requirements, and Mitigation Measures.

The Report Preparation Resources section includes Organizations and Persons Contacted, Prepares and Contributors to the Report, and References.

TECHNICAL STUDIES

The following technical studies were prepared for the proposed project:

Traffic Analysis

Allan G Tilton, P. E.
Consulting Traffic Engineer

Noise Assessment

T.A. Barneby, Ph.d.
Sound Solutions

These studies are summarized in the appropriate environmental section. Each study is included in its entirety in this EIR in the Appendices of this report.

COMMUNITY CONCERNS/MAJOR ISSUES

The major issues of the project were identified in the May 17, 1990 Notice of Preparation. This EIR addresses in detail the following:

- Land Use
- Population
- Housing

- Traffic/Circulation
- Air Quality
- Noise
- Biological Resources
- Public Services



PROJECT DESCRIPTION

PROJECT DESCRIPTION

PROJECT LOCATION

The City of Calistoga is located in the extreme northern end of the Napa Valley near where the Mayacama and the Vaca Mountains converge. The City is at the junction of State Highways 29 and 128. It is located twenty-seven miles north of Napa, twenty miles north of Santa Rosa, and seventy four miles northeast of San Francisco. Exhibit 1 provides an illustration of the City's location relative to other cities, highways, and the Napa County boundaries.

For planning purposes a Study Area has been formulated for the General Plan Update. Exhibit 2 depicts the Study Area boundaries. These areas are larger than the City limits and do not necessarily correspond to any city or other boundary. Although the City does not have direct jurisdiction over the Study Area, it is intended to reflect a community's identity and to designate an area for which a community could give consideration and develop planning policies. Exhibit 3 presents a USGS quad map for the Study Area.

The Study Area generally encompasses the City of Calistoga and small portions of land to the east, west, and northwest. The Study Area for the General Plan Update consists of approximately 3.43 square miles or 2200 acres. Within this Study Area approximately 2.5 square miles or 1600 acres are within the City limits.

PROJECT CHARACTERISTICS

The proposed project is a General Plan Update of the current General Plan of the City of Calistoga adopted March 15, 1977. The most current element of the General Plan is the Housing Element, September 1985, which requires updates every five years. As part of this General Plan Update the following elements will be revised:

- **Land Use Element:** This element designates the general distribution and intensity of uses of the land for housing, business, industry, open space, education, public buildings and grounds, waste disposal facilities, and other categories of public and private use. Exhibit 4 depicts the revised Land Use map. Table A indicates the intensity/density standards while Table B indicates development potential.
- **Circulation Element:** This element consists of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the Land Use Element. Exhibit 5 depicts the revised Circulation Plan.



Source: Napa County General Plan

REGIONAL LOCATION

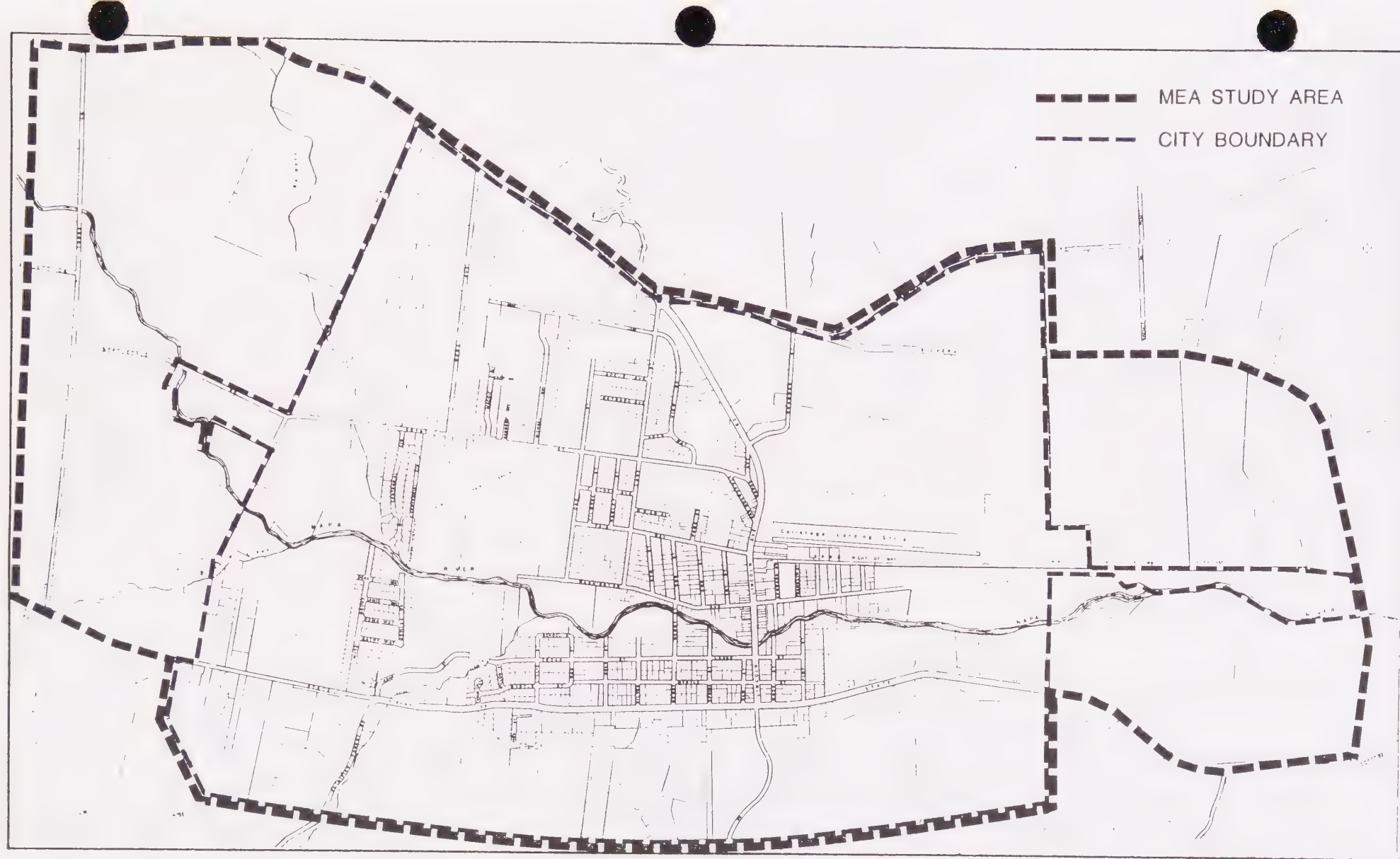
GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT
City of Calistoga



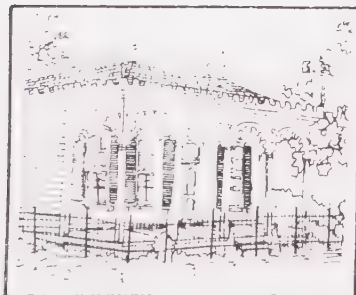
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Exhibit 1



Source: Ed Hayworth



STUDY AREA

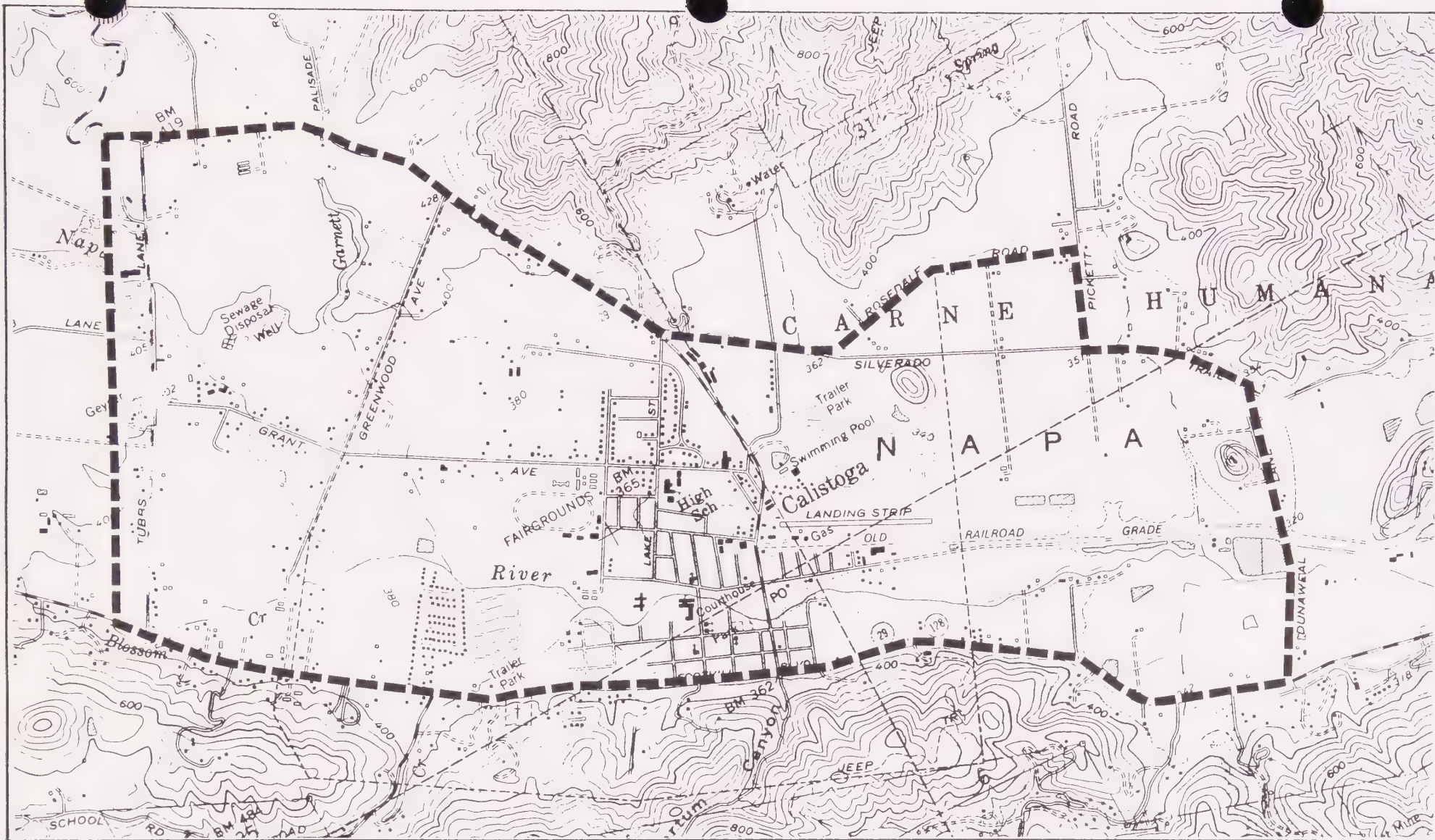
GENERAL PLAN UPDATE ENVIRONMENTAL IMPACT REPORT City of Calistoga

STA inc.

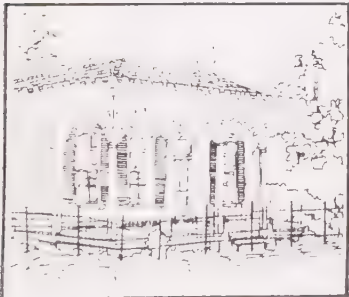
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Exhibit 2



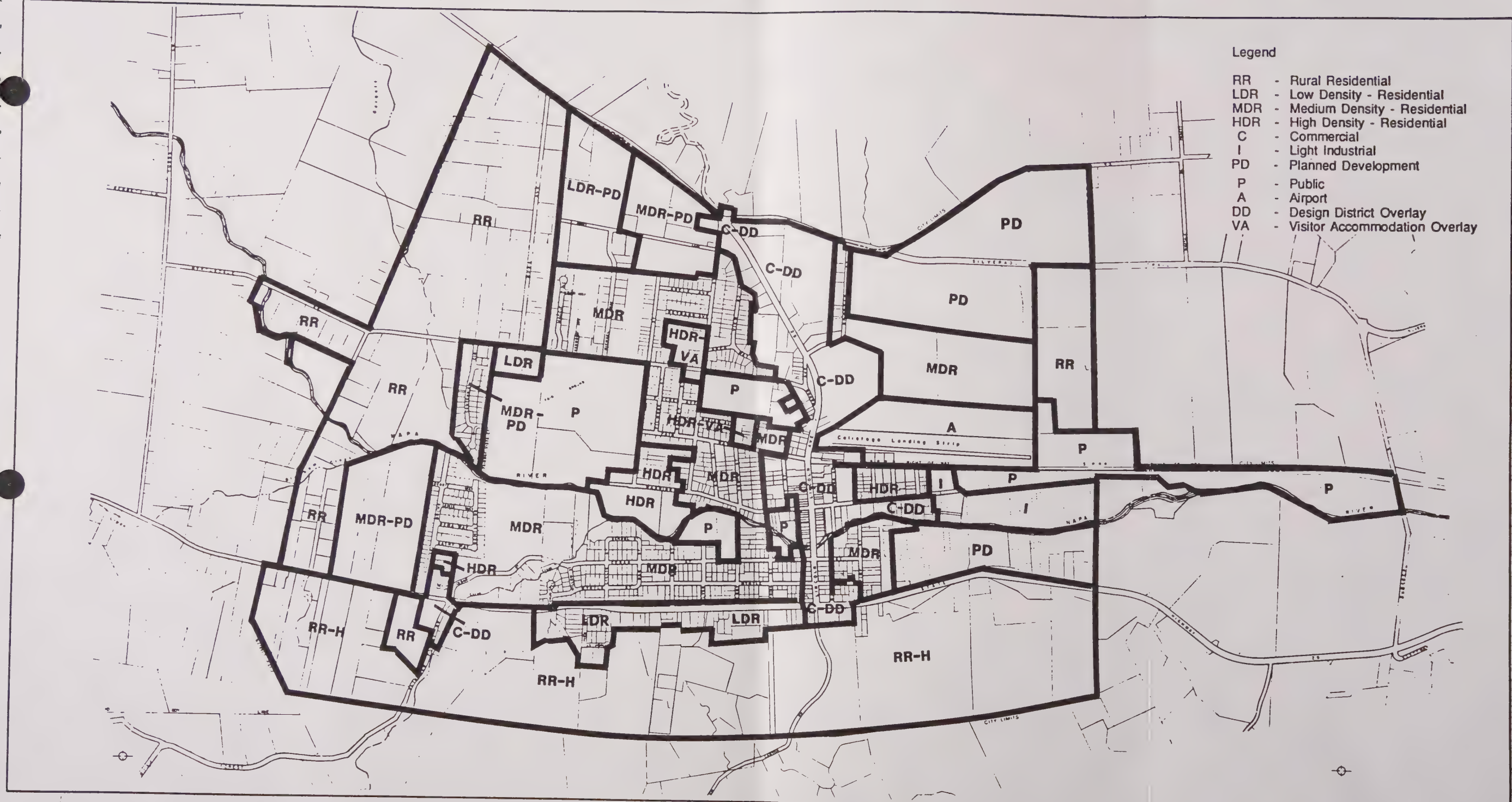
Source: USGS Map-Calistoga Quad



USGS MAP GENERAL PLAN UPDATE ENVIRONMENTAL IMPACT REPORT City of Calistoga



Exhibit 3



- Legend
- RR - Rural Residential
 - LDR - Low Density - Residential
 - MDR - Medium Density - Residential
 - HDR - High Density - Residential
 - C - Commercial
 - I - Light Industrial
 - PD - Planned Development
 - P - Public
 - A - Airport
 - DD - Design District Overlay
 - VA - Visitor Accommodation Overlay



LAND USE PLAN
 GENERAL PLAN UPDATE
 ENVIRONMENTAL IMPACT REPORT
 City of Calistoga

Source: City of Calistoga



Exhibit 4

TABLE A
DENSITY AND INTENSITY STANDARDS

DESIGNATION	USE	MAXIMUM DENSITY/INTENSITY
Residential Base:		
RR	see Appendix B	1 unit/20,000 s.f.
LDR	see Appendix B	1 unit/10,000 s.f.
MDR	see Appendix B	1 unit/6,000 s.f.
HDR	see Appendix B	1 unit/2,000 s.f.
Residential Combining:		
HR	see Appendix B	1 unit/40,000 s.f.
PD	see LDR, MDR, HDR in Appendix B	see LDR, MDR, HDR
Commercial Base:		
C	motels, hotels, inns, other commercial uses	1 unit/1,000 s.f. FAR .8
I	light industrial	FAR .9
A	other airport commercial uses	FAR .1
Commercial Combining:		
VA	hotel, motel, inn, Bed and Breakfast	1 unit/1,000 s.f.
DD	see C district	same as C base district

Continued

TABLE A (Cont.)

DENSITY AND INTENSITY STANDARDS

DESIGNATION	USE	MAXIMUM DENSITY/INTENSITY
Public/Quasi Public Base:		
P	public/quasi public	FAR .8
Planned Development Base:		
PD	see Appendix B	see the following designations: RR LDR MDR HDR C-DD I

Source: City of Calistoga Planning Department

Notes: To calculate population densities, the following procedure should be used: household size (2.1) x maximum number of future dwelling units (1,623) = 3,408.

For the development land potential analysis, please refer to the revised MEA and Issues and Options document for assumptions and other build-out calculations. The estimated number of future dwelling units reflects the chosen land use plan of March 26, 1990 shown on Exhibit 3.

TABLE B

PROPOSED LAND USE PLAN
DEVELOPMENT POTENTIAL

ZONE	#PARCELS	#HOUSING UNITS	COM. SQ.FT.	AC (NET)	%TOTAL
RR	108	509	--	399	63
LDR	17	106	--	28	4.5
MDR	100	615	--	98	15
HDR	22	259	60,000	17	2
C	37	--	716,810	27.5	4
I	2	--	373,750	6	1
PD	8	134	637,264	66.34	10
A	2	0	25,000	.5	.5
TOTALS:	296	1,623	1,812,824	642.34	100

Source: City of Calistoga Planning Department

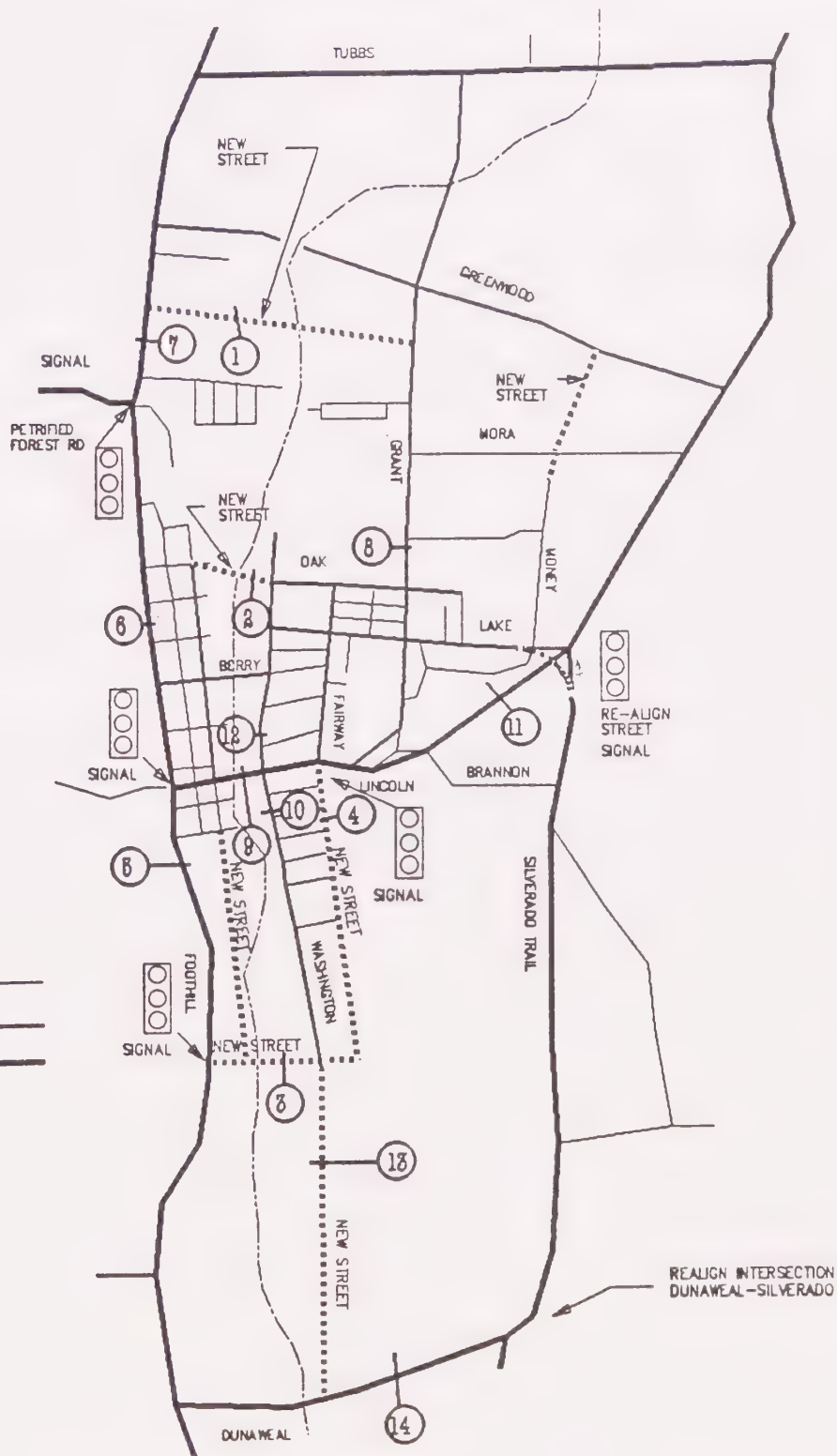
Note: POTENTIAL USES OF COMMERCIAL LAND

Retail/Office: 460,650 sq. ft.

Transient: 665 units

Restaurant: 118,240 sq. ft.

Industrial: 426,495



KEY

LOCAL STREETS —
 COLLECTOR STREETS ==
 ARTERIAL STREETS ==



CIRCULATION PLAN

GENERAL PLAN UPDATE
 ENVIRONMENTAL IMPACT REPORT
 City of Calistoga

STA inc.
 no scale



Exhibit 5

- **Housing Element:** This element consists of an identification of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. This element identifies adequate sites for rental housing, factory-built housing, mobilehomes, and emergency/transitional shelters as appropriate. This element also makes adequate provision of the existing and projected needs of the community.
- **Conservation Element:** This element includes goals and policies related to the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, fisheries, wildlife, minerals, and other natural resources.
- **Open Space Element:** This element is a plan for the comprehensive and long-range preservation and conservation of "open space land". "Open space land" is defined as any parcel or area of land or water that is essentially unimproved and devoted to open-space use.
- **Safety Element:** This element addresses the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure. Other issues discussed include: slope instability, subsidence and other geologic hazards, flooding, and wildland and urban fires. The element also addresses evacuation routes, peakload water supply requirements, and minimum road widths and clearances around structures.
- **Noise Element:** This element identifies noise problems in the community. This element also analyzes and quantifies, to the extent practical, current and projected noise levels for all sources of significance.
- **Geothermal Element:** This element seeks to exert local control over some aspects of geothermal energy exploration, recovery, and power production.

REQUIRED DISCRETIONARY ACTION

The following section describes discretionary actions that are required for project approval. For all actions, approval is granted by the lead agency, the City of Calistoga. Although they lack discretionary approval, the State of California Housing and Community Development Department and the Division of Mines and Geology Department will review the Housing Element and the Safety Element, respectively.

1. **Certification of the EIR.** Acceptance of an environmental document as having been prepared in compliance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines, the City of Calistoga

CEQA Guidelines, and certification that the data was considered in final decisions on the project.

2. **Adoption of the General Plan.** Adoption of the General Plan Update by the City of Calistoga.

PROJECT HISTORY

On March 15, 1977, the City of Calistoga adopted the current General Plan. In October 1989, the City began the process of updating the current General Plan. In December 1989, the City issued the Master Environmental Assessment (MEA) and Issues & Options report. After selection of land use and circulation alternatives in March 1990, the City of Calistoga initiated the General Plan Policies and Programs Document and consequently the environmental process related to the project.

PROJECT OBJECTIVES

1. Establish within the City the capacity to analyze local and regional conditions and needs in order to respond effectively to the problems and opportunities facing the community;
2. Identify the community's environmental, social, and economic goals;
3. Record the City of Calistoga's policies and standards for the maintenance and improvement of existing development and the location and characteristics of future development;
4. Improve the coordination of community development activities among local, regional, state, and federal agencies; and
5. Establish a basis for subsequent planning efforts, such as preparation of specific plans, redevelopment plans, and special studies, to deal with unique problems or areas in the community.

LEAD AND RESPONSIBLE/TRUSTEE AGENCIES

Lead Agency

The project sponsor and applicant is the City of Calistoga. In conformance with Sections 15052 and 15367 of the State CEQA Guidelines, the City of Calistoga has been designated as the "lead agency" which is defined as the "public agency which has the principal responsibility for carrying out or disapproving a project." As the General Plan is implemented the following responsible/trustee agencies may have discretionary approvals. The Lead Agency contact is:

City of Calistoga

Richard Spitler
Acting Planning Director
1232 Washington Street
Calistoga, CA 94515
(707) 942-5188

Possible Responsible/Trustee Agencies

California Air Resources Board
1102 Q Street
P. O. Box 2815
Sacramento, CA 95812

California Department of Conservation
1416 Ninth Street
Sacramento, CA 95814

California Department of Fish and Game
P. O. Box 47
Yountville, CA 94599

California Department of Food and Agricultural
1220 N Street
Sacramento, CA 95814

California Department of Housing and
Community Development
921 Tenth Street
Sacramento, CA 95814

California Department of Conservation
Division of Mines and Geology
1416 Ninth Street, Room 1326-2
Sacramento, CA 95814

California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94109



REGIONAL AND LOCAL SETTING

REGIONAL AND LOCAL SETTING

INTRODUCTION

Napa County's 513,000 acres of land and water consist mostly of mountain ridges and narrow valleys stretching across the county in a northerly-southerly axis. Napa County is located between the Vaca Mountains on the east and the Mayacama Mountains on the west. The southern border also consists of the marshy delta bordering San Pablo Bay. The western and eastern portions are made up of highland areas which consist of parallel mountain ridges with intervening valleys. Mt. St. Helena has the highest elevation in the county at 4,344 feet above sea level. There are four cities in Napa County: Calistoga (4,386 pop.), St. Helena (5,098 pop.), Yountville (3,065 pop.), and Napa (57,863 pop.). The population figures represent 1989 totals.

The City of Calistoga is located in the extreme northern end of the Napa Valley near where the Mayacama and the Vaca Mountains converge. The City is at the junction of State Highways 29 and 128. It is located twenty-seven miles north of Napa, twenty miles northeast of Santa Rosa, and seventy-four miles northeast of San Francisco. Exhibit 1 in the Project Description section provides an illustration of the City's location relative to other cities, highways, and the Napa County boundaries.

SPHERE OF INFLUENCE

A Sphere of Influence is a defined area established by the City and the Local Agency Formation Commission (LAFCO) which represents the "probable ultimate boundary" of the City. The adoption of Sphere of Influence is required by State Government Code 56076, 56301, 56378, and 56425. The Sphere of Influence of the City of Calistoga is coterminous with the City boundary.

STUDY AREA

For planning purposes a logical study area has been formulated for the General Plan Update. These areas are larger than the City's Sphere of Influence and do not necessarily correspond to any city or other boundary. Although the City does not have direct jurisdiction over the study area, the study area is intended to reflect a community's identity and to designate an area for which a community could give consideration and develop planning policies.

The City of Calistoga General Plan boundary is within the Calistoga Study Area. The Study Area generally encompasses the City of Calistoga, its Sphere of Influence, and small portions of land to the east, west, and northwest.

In total, the Calistoga Study Area occupies approximately 2,200 acres, or 3.43 square miles. The Study Area generally lies to the west of Dunaweal Lane; to the south of Rosedale Road, Silverado Trail, and Lake County Highway; to the east of Tubbs Lane's frontage lots; and to the north of Foothill Boulevard frontage lots. Exhibit 2 in the Project Description section indicates the boundaries of the MEA Study Area.

LOCAL PLANNING EFFORTS

The Calistoga General Plan was adopted on March 15, 1977. The most current element of the General Plan is the Housing Element, September 1983, which requires updates every five years. Amendments to the Housing Element were adopted in April 1985. Although this General Plan has been able to meet the community's needs for several years, it is now in need of update. A General Plan is currently under preparation. This MEA is the first step of the General Plan process outlined by the City of Calistoga Planning Department.

Two recent moratorium ordinances have been adopted which limit growth in the City. Ordinance No. 449 places a moratorium on land use applications. Ordinance No. 442 places a moratorium on water and sewer hook-ups.

NAPA COUNTY PLANNING EFFORTS

Napa County General Plan

The Napa County General Plan was adopted by the Supervisors on June 7, 1983, and most recently amended February 1990 to reflect the Napa County Winery Ordinance discussed below. The Napa County General Plan summarizes County Planning Goals and Objectives; and establishes a balance between diverse and conflicting programs. It helps maintain the compatibility of economic and environmental objectives and provides guidance for the allocation of resources.

The Napa County General Plan includes the following elements: Land Use, Housing, Circulation, Scenic Highways, Conservation, Open Space, Seismic Safety, Safety, and Noise. Goals and policies that affect the City of Calistoga are provided below. The majority of these goals and policies are related to the concept of development occurring within city boundaries.

Land Use

- | | |
|--------|--|
| Goal 1 | To plan for agriculture and related activities as the primary land uses in Napa County and concentrate urban uses in the County's existing cities and urban areas. |
|--------|--|

- Policy 4.4 Low and Moderate Cost Housing - The county will work with the cities to see that low and moderate cost housing is provided in proportion to the number of low and moderate income householders in Napa County.

Housing

- Policy 4.2 The County shall accommodate the distribution of population among the sub-areas of the County, giving preference to existing incorporated and urban areas in the construction of new housing.
- Policy 6.1 The County will encourage annexation to existing cities for proposed developments where urban services and facilities are required as opposed to creating special districts to accommodate such projects.
- Policy 8.1 In its land use policies the County will encourage the use of existing urban areas when planning for development for urban densities and services.

Circulation

- Policy 2d Continue efforts to improve Silverado Trail between Trancas Street and S.R. 29 in Calistoga as a two lane arterial...
- Policy 7b Hiking paths and bicycle lanes should be integrated with nonmotorized transportation facilities in the incorporated cities of the County
- Policy 8g The County and Cities should continue providing bicycle storage and locking facilities near public buildings, and in parks and schools. Developers should be encouraged to provide such facilities in shopping and commercial areas. Bicycle parking should be provided free of charge. Funding sources such as bicycle license fees and meter revenues should be considered.

Napa County Growth Management System

Napa County adopted a Growth Management System as a result of a voter approved initiative (Measure A) in 1980. The Growth Management System allows a 118 dwelling unit allocation in Napa County unincorporated. This ceiling of dwelling units promotes city-centered urban development, and reduces the unincorporated area's total share of the regional housing needs.

Napa Winery Ordinance

In February, 1990 Napa County lifted a moratorium on wineries and enacted a set of comprehensive winery regulations. The General Plan has been amended to reflect this

ordinance. Regulations of this ordinance include the following: existing wineries with the agricultural preserve are designated as legal non-conforming uses; new wineries may offer tours, but by reservation only; all wineries renting facilities to parties will be required to show that the gatherings are related to wine selling; and at least 75 percent of the grapes used by new wineries and expansions of existing wineries must be from the Napa Valley.

REGIONAL PLANNING EFFORTS

In September 1988, the Association of Bay Area Governments (ABAG) published their Housing Needs Determination study. This study indicates that in 1988 there was a total of 44,162 dwelling units in Napa County, of which 2,074 are located in the City of Calistoga. The study further relates that the City of Calistoga's housing need is 310 dwelling units by 1995. The final Housing Needs Determination was prepared in January 1989.

The Association of Bay Area Governments, 1980 Regional Plan, includes the Napa Valley Planning Area. Although this subregional area's general conditions and issues are discussed, a regional position related to Napa Valley has not been delineated. The Executive Board has not taken action on goals and policies related to this subregional area.

In December 1987, the Metropolitan Transportation Commission prepared its Regional Transportation Plan for the San Francisco Bay Area. Major programmed roadway improvements near Calistoga include improvements to Highway 29 between Silverado Trail and Tubbs Lane. These improvements could include lane widening, channelization, and passing lanes.



ENVIRONMENTAL ANALYSIS

LAND USE

INTRODUCTION

The purpose of this section is to address the impact of the proposed land use on the existing land use setting in the City of Calistoga. This section includes a brief discussion of the current land use plans and policies and a discussion of land utilization within the General Plan Study Area.

EXISTING CONDITIONS

Existing Land Use

The City of Calistoga is comprised of approximately 1,600 acres or 2.5 square miles. Exhibit 4 of Volume I in the MEA of the General Plan Update provides an aerial photograph of the existing land uses in the City. Exhibit 6 contains a coded graphic depicting existing land categories in the City. The City predominantly contains single family residential uses (60%). Approximate land use distribution acreage is as follows: Single Family 970, Vacant 298, Public Use 104, Commercial 72, Roadways 68, Agriculture 66, Multiple Family 15, and Industrial 7.

The Study Area outside of the City limits is comprised of approximately 600 acres or .93 square miles. The predominant existing land uses in the Study Area are vacant parcels and Single Family uses. There are also commercial uses adjacent to Tubbs Lane. These include: a winery, a building supply store, a retail store, a tourist site, and a substance abuse center.

Existing Land Use Plans

The current Land Use Plan was adopted on March 15, 1977 as a part of the Calistoga General Plan. The most recent element update, September 1983, was the revision of the Housing Element which was subsequently amended in 1985. Residential categories include: Rural Residential (0-1 Dwelling Unit per Net Acre), Lowest Density Urban Residential (0-5 Dwelling Units per Net Acre), Medium Density Urban Residential (5-12 Dwelling Units per Net Acre), and Highest Density Urban Residential (5-20 Dwelling Unit per Net Acre). Non-residential uses include: Town Center Commercial, Highway Commercial, Commercial-Industrial, Controlled Industrial, Professional, Planned Development, Medical Services, and Transitional. The 1977 General Plan is intended to be a community policy statement regarding the use or management of its physical resources. The current General Plan ensures development is sensitive to the small town character of the City while allowing for planned growth.



Source: City of Calistoga



EXISTING LAND USE GENERAL PLAN UPDATE ENVIRONMENTAL IMPACT REPORT City of Calistoga



Exhibit 6

The current City Zoning Ordinance was adopted in 1979. Zoning Designations include: Rural Residential District, Single-Family Residence District, Two-Family Residence District, Residential/Professional Office, General Commercial District, Planned Unit Development District, and Highway Commercial District. Designated special districts include: Agriculture Exclusive District, Hillside Residential District, and Transitional District.

The County of Napa Zoning Ordinance prescribes four zoning designations surrounding the Calistoga Study Area. These zones include: Agricultural Preserve to the north and east, Residential Country to the southeast, Agricultural Watershed to the south and west, and a small parcel of Commercial Neighborhood at the northeast corner of Tubbs Lane and Highway 128.

Two zones are located within the Calistoga General Plan Study Area outside the City limits. These include Agricultural Preserve (AP) and Commercial Neighborhood (CN). The Agricultural Preserve zone is intended to be applied in the valley and foothill areas in which agriculture should dominate land use. It is suspected that land zoned AP near the City is not suitable for agricultural uses due to geothermal contamination. The CN classification is intended to serve residential areas with neighborhood commercial uses.

Resources Management System Land Use Policies

In response to shortages related to water and wastewater treatment facilities and to allocate 500 feet of water received through the NBA project, the City of Calistoga, established a Resource Management System on September 18, 1984. The following is a brief discussion of the Resource Management System, as amended, and the Draft Resource Management System under consideration by the City of Calistoga.

The 1984 Resource Management System (RMS) has served as a method to control growth in order to respond to the water and wastewater facility shortages. The RMS officially began on October 15, 1984. It was the intent of the RMS to carefully phase development in a manner consistent with the provision of public improvements. It was also the intent of the RMS to maintain control over the character of development in order to avoid social, physical, and fiscal impacts. This was to be achieved by limiting growth to 2-3% annually, and to review discretionary permits in terms of their potential impact on the social, economic and environmental characteristics of the community.

The annual allocation system for the RMS establishes a schedule of water consumption for proposed developments. This schedule provides for approximately 20% of the water per year to be sold for qualified projects through the year 2003.

Projects are placed into two categories. Group I are those projects that do not require discretionary review for a use permit, subdivision, or development plans, and are located in zones R-R, R-H, R-1, R-2, R-3, and C, MHP, P-D, C-H, and T and P-M, or consist of

four (4) or fewer dwellings, have five (5) or fewer employees, or involve less than 5,000 square feet of building area. A Group I project may not exceed 2.0 acre feet estimated annual average water need. Group I water allocations shall be on a first come first serve basis.

Group II are those projects which exceed Group I limitations and/or that would now require discretionary review for a use permit, subdivision, or development plans located in any of the R-1, R-2, R-3, C, R-R, MHP, P-D, C-H, T, P-M, and R-H zones. Group II projects are offered two times a year: November 1; and if there is still remaining water, May 1. Group II offers are reserved for six (6) months upon payment of fifty (50) percent of the water development service connection charge within sixty (60) days from the date of offer of water services by the City.

The water needs of any given project are determined by the standardized evaluation table and/or a special water needs evaluation. Table C provides the water use standards currently utilized by the City. A Draft RMS amendment is currently under review by the City of Calistoga. This amendment could change the current water use standards as well as provide additional regulations for water and sewer hook-ups.

IMPACTS

Under CEQA, the loss of prime agricultural land or the impairment of agricultural activity is considered a significant impact. For purposes of this EIR impacts that result in substantial land use incompatibilities are also considered significant. Substantial land use incompatibilities include the transition from Rural Residential or Low Density Residential to Commercial or Industrial uses.

Proposed Land Uses

Implementation of the proposed General Plan will result in changes to existing land use in the City of Calistoga. The majority of vacant parcels would be developed with residential uses. These residential uses include Rural Residential, Low Density Residential, Medium Density Residential, and High Density Residential.

Vacant parcels along the northern portion of Lincoln Avenue are designated for commercial uses. A substantial vacant parcel at the eastern terminus of Washington Street is designated for Planned Development Use.

The proposed land uses are listed below. Appendix B of this Volume of the General Plan Update details the following land use designations. Their associated density and intensity standards are provided in the Project Description section of this report.

TABLE C
WATER USE STANDARDS

USE	UNIT	ACRE FEET PER YEAR
Boarding House	Per Bed	0.10 each
1 Bedroom	Per Living Unit	0.16 each
2 Bedrooms	Per Living Unit	0.32 each
3 Bedrooms	Per Living Unit	0.48 each
Transient Lodging	Per Living Unit	0.18 each
Commercial	Per Single Bath. Facility Plus Process Water Needs in Acre Feet/Year	0.06 each

Source: Resource Management System, June 2, 1987

- RESIDENTIAL BASE DESIGNATIONS
 - (RR) Rural Residential
 - (LDR) Low Density: Residential
 - (MDR) Medium Density Residential
 - (HDR) High Density: Residential
- RESIDENTIAL COMBINATION DESIGNATIONS
 - (HR) Hillside Residential
 - (PD) Planned Development
 - (VA) Visitor Accommodations
- COMMERCIAL BASE DESIGNATIONS
 - (C) General Commercial
 - (I) Light Industrial
 - (A) Airport
- COMMERCIAL COMBINATION DESIGNATIONS
 - (VA) Visitor Accommodations
 - (DD) Design District
- PUBLIC/QUASI-PUBLIC DESIGNATIONS
 - (P) Public/Quasi Public
- PLANNED DEVELOPMENT BASE DESIGNATION
 - (PD) Planned Development

Designation of Existing Vacant Parcels

The majority of existing vacant parcels that have been changed from their current land use include the change from agricultural to Rural Residential and Medium Density Residential uses. This is not considered a significant impact.

The loss from agriculture to residential uses is not considered a significant land use impact. Exhibit 7 depicts prime agricultural lands within the City. One small parcel is designated as Prime Agricultural lands by the Napa County Important Farmlands Map. Rural Residential land uses are proposed for this site. Limited light agricultural uses and structures are allowed uses on this designation. This is not considered a significant impact.

It is suspected that prime agricultural lands outside the City but within the Study Area could be contaminated by geothermal resources. This should be further analyzed if the Study Area is made a part of the Sphere of Influence of the City in the future.



Source: Napa County Important Farmland Map, July 1986

IMPORTANT FARMLANDS MAP

GENERAL PLAN UPDATE
 ENVIRONMENTAL IMPACT REPORT
 City of Calistoga

STA inc.
 no scale



Exhibit 7

Land Use Compatibility

The majority of the proposed land use designations are compatible. Implementation of the General Plan will result in a few incompatible land uses. These areas of impacts depicted in Table D are mitigated to a level of insignificance through the proposed mitigation measures. Incompatible uses include adjacent uses of commercial and residential uses. The majority of commercial and residential incompatibilities occur within median density residential areas. Mitigation measures have been provided to mitigate this impact to a level of insignificance.

Adjacent land use designations in unincorporated County of Napa include Agricultural Preserve, Agricultural Watershed, and Residential Country. These uses are considered compatible with City of Calistoga land use designations. No significant impacts are anticipated.

Proposed Land Use Plans

General Plan

The proposed land use plan is not a radical departure from the existing land use plan adopted on March 15, 1977. The proposed plan reflects adjustments that are reflective of the communities needs. A comparison of the differences of the two plans is not a CEQA impact analysis requirement. A brief analysis of the development of the current land use plan is presented in the Alternatives section of this EIR (Development Under Existing General Plan).

Zoning Code

The City of Calistoga General Plan and Land Use Map will have an impact on the Zoning Code. The following issues related to the Zoning Code through the General Plan will need to be brought into consistency.

- | | |
|-------------------------------------|------------------------------------|
| ● Land Use Designations | ● Emergency/Transitional Shelter |
| ● Oaktree Preservation Ordinance | ● Convalescent Care Facilities |
| ● Residential Density Bonuses | ● Bed and Breakfast Establishments |
| ● Manufactured/Mobile Homes | ● Subdivision Map Act |
| ● View Corridors, Unique Land Forms | ● Scenic Highways |

Resources Management System

In order to implement the City of Calistoga General Plan the City will need to provide a mechanism for the provision of water and wastewater services. The purpose of the Resource Management System (RMS) is to control growth in response to water and wastewater facility shortages. Implementation of the General Plan is not considered an

TABLE D
LAND USE INCOMPATIBILITY

COMMERCIAL DESIGNATION	RESIDENTIAL DESIGNATION	LOCATION
<u>City of Calistoga</u>		
Commercial-DD	Low Density Rural Residential-H	South of Highway 29, near Lincoln Avenue
Commercial-DD	Rural Residential	South of Highway 29, West of Petrified Forest Road

Source: STA Planning, Inc.

wastewater facility shortages. Implementation of the General Plan is not considered an impact to the RMS. The RMS system, through mitigation, will be proposed as a manner to continue keeping an accurate balance between the availability of public facilities and development.

Other Plans or Programs

This General Plan will initiate or expand upon previous plans or programs that relate to existing land use or the regulations upon land uses in the City of Calistoga. These programs include an Urban Design Study, Construction of Public Facilities, Hillside Management Ordinance, and designation of a Scenic Highways Corridor. Implementation of these plans or programs is not expected to create significant land use impacts. Mitigation measures have been provided to implement these programs.

MITIGATION MEASURES

1. The City shall amend the Zoning Code to ensure that proposed commercial development abutting residential uses provides for ample building setbacks and buffering.
2. The City shall amend the Zoning Code to require multi-family structures located adjacent to single-family parcels to incorporate adequate screening into project design to prevent view intrusion.
3. The City shall amend the Zoning Code to avoid incompatible building heights.
4. The City shall prioritize development on infill parcels with existing public services and utilities.
5. The City shall discourage General Plan Amendments that affect the balance of land uses such as uses which would create a jobs/housing imbalance.
6. The City shall amend the Zoning Code to protect the integrity of residential neighborhoods by restricting non-residential uses.
7. The City shall petition LAFCO to expand its Sphere of Influence to include the Study Area.
8. The City shall ensure that the Zoning Code prohibits tourist-based business outside the downtown area.
9. The City shall locate neighborhood commercial within easy access to future residential developments.

10. The City shall amend its Zoning and Subdivision Codes to allow for adequate landscaping in non-residential areas.
11. The City shall prepare an urban design study to coordinate the development of pedestrian amenities and the character of the downtown area. The study will include:
 - Parking design and location
 - Street tree theme
 - Lighting
 - Street furniture
 - Building scale, bulk, and facade treatment
 - Sign regulations
 - Landscape standards
12. The City shall designate sufficient land only to increase visitor accommodations in order to encourage visitors to stay overnight.
13. Through a revised Resource Management System Ordinance the City shall monitor new development to ensure the adequate provision of water and wastewater services.
14. Through its corporate powers the City shall provide for the construction of the following facilities:
 - a new police facility
 - an additional fire substation on the west side of Calistoga
 - an upgraded and expanded library
 - a public swimming pool for school and recreation
 - a senior citizen center
 - new school sites as population levels warrant
 - a youth recreation center
15. The City shall ensure that new development is phased concurrently with planned infrastructure expansions.
16. The City shall retain areas for visual amenities through development controls to protect the ridgeline and provide for site and design review of all development proposals.
17. Through site and design review, the City shall ensure that proposed development shall not be visible from the valley floor. The appearance of rows of houses along the skyline shall be avoided.

18. The City shall prepare a hillside management ordinance that will address:
 - development location
 - grading
 - revegetation and landscaping
 - light and glare
19. Through the environmental review process, the City shall analyze areas of ecological sensitivity in relation to proposed development.
20. The City shall prepare an Urban Design Plan for selected entrances to the City and the downtown core area.
21. The City, in conjunction with the County of Napa, shall obtain official designation of Highways 29 and 128, and the Silverado Trail as Official State Scenic Highways.
22. Using citizen input, the City shall develop guidelines for each proposed scenic route corridor as required by the state, including guidelines for land use, site planning, outdoor advertising, landscaping, earth moving, and design.
23. The City shall develop Zoning Code provisions to require that new development at the major entrances to the City be aesthetically pleasing in design, provide buffering between land uses, and retain open space and unique land features.
24. The City shall establish a scenic highway overlay in the Zoning Code to ensure development retains scenic vistas along Silverado Trail and Lake County Highway.
25. The City shall coordinate with the operators of the Napa Valley Wine Train to extend the service to Calistoga subsequent to environmental analysis.
26. Through the environmental review process, the City shall analyze County-proposed developments for compatibility with adjacent City uses.

LEVEL OF SIGNIFICANCE

The adoption of new land use designations is considered a insignificant impact. Conversions of agricultural uses to residential uses are considered insignificant impacts. Adjacent land use designations in unincorporated County of Napa are considered compatible.

Impacts mitigated to a level of insignificance include: compatibility impacts with commercial and residential uses; zoning code changes needed to achieve consistency between it and the General Plan; the Resource Management System; and other plans and

programs including Urban Design Study, Construction of Public Facilities, Hillside Management Ordinance, and Scenic Highways Corridor.

No unavoidable significant project-specific or cumulative impacts have been identified.

POPULATION

EXISTING CONDITIONS

The City's population is included in the U.S. Census Tract 2020 which is coterminous with the City limits. Population figures from the 1950 through the 1980 census are shown in Tables E and F. The figures between decades are the State Department of Finance annual estimates. These figures are published annually each January. The next U.S. Census will be in April 1990.

The City's population increased over the 1970-80 period from 1,882 to 3,879 persons, an increase of 106 percent. Since then, the population reached 4,374 in 1988 indicating a leveling off of a 13 percent increase for the nine year period. Accordingly, the average annual population increase has dropped from 10 percent in 1970-80 to 1.4 percent annually in the period 1980-89.

The actual average growth rate (continuous) for Calistoga during the period from 1980-89 is calculated to be 1.4%. If this same growth rate is projected through the year 2010, Calistoga's population would be 5,954. This is equivalent to an additional 71 persons per year or 34 housing units per year.

Compared to Napa County population figures, as shown in Table F, the City of Calistoga's growth in 1980-89 corresponds to that experienced by Napa County. However in 1970-80 the average yearly growth of Calistoga (10.6%) was five times that of the County (2%) for the same period. This is largely attributed to the approval of three large mobile home parks and the Heather Oaks Subdivision (Riverlea).

Population Characteristics

The MEA and Issues & Options Volume of the General Plan Update (December 1989) revealed the following about Calistoga's population:

- The City of Calistoga has a high percentage (39%) of senior citizens.
- Calistoga's population is predominately white (88%).
- The City's Hispanic population has grown since 1970. Presently this ethnic group equals 12% of Calistoga's population.

These characteristics influence the types of public services and housing needed.

TABLE E
CALISTOGA HISTORICAL POPULATION GROWTH

YEAR	POPULATION	POPULATION INCREASE	PERCENT INCREASE
1950*	1418	--	--
1960*	1514	96	6.7
1970*	1882	368	24.0
1972	2062	180	9.6
1973	2130	68	3.3
1974	2230	100	4.5
1975+	2832	602	27.0
1976	2994	162	5.7
1977	3310	316	10.6
1978	3418	108	3.3
1979	3550	132	3.9
1980*	3879	329	9.3
1981	3964	85	2.2
1982	3973	9	0.2
1983	4022	49	1.2
1984	4049	27	0.7
1985	4066	17	0.4
1986	4218	152	3.7
1987	4340	122	2.9
1988	4374	34	0.8
1989	4386	12	0.3

Source: State Department of Finance

Notes: * U.S. Census
+ 1975 Napa County Special Census

TABLE F
POPULATION OF CALISTOGA, NAPA COUNTY AND BAY REGION

YEAR	POPULATION	PERCENT CHANGE
<u>Calistoga</u>		
1960	1,514	--
1970	1,882	24.0
1980	3,879	106.1
<u>Napa County</u>		
1960	65,890	--
1970	79,140	20.0
1980	99,199	25.0
<u>Bay Region</u>		
1960	3,638,939	--
1970	4,630,311	27.2
1980	5,179,784	11.9

Source: 1960, 70 and 80 U.S. Census

Household and Family Composition

A household is any group living together in a residence, whether related or unrelated. Over the years average household size has steadily declined nationwide. In 1970 average household size in Calistoga was 2.08 persons; the figure increased to 2.11 persons in 1980. In 1989, the average household size was calculated at 2.13 by the California Department of Finance. ABAG predicts by 1990 it will drop to 2.1 and 1.96 by 2005. Assuming this trend will continue it will be 1.95 by 2010.

The total number of households in Calistoga has increased from 878 in 1970 to 1,791 in 1980 and 1,880 in 1985. In 1980 43% (788) of the total households were headed by elderly persons. Five (5)% or 99 households were female head of households (no spouse).

Calistoga Service Area

Census Tract 2019 takes in the surrounding areas outside the City limits and encompasses a greater portion of the population serviced by the City of Calistoga. The 1960 U.S. Census reported the population as 981 for the area. In 1970 the population dropped to 954 showing a loss of 27 people. During this same period, the City of Calistoga population increased by 368 people. In 1980 the population of this area increased to 1,252. This indicated a 31% increase for the 1970-80 period and an average of 3% a year. The City also experienced a large growth rate of 101% for the 1970-80 period. Population characteristics for Census Tract 2019 are shown in Table G. The population of the surrounding areas contributes to the need for services in Calistoga and therefore creates a demand on land use.

TABLE G

CENSUS TRACT 2019 POPULATION CHARACTERISTICS

	1960	1970	1980
Census Tract 2019	981	954	1,252

Source: 1960, 70, and 80 U.S. Census

IMPACTS

Under CEQA, induced growth or concentration of population is considered a significant impact. For the purposes of this EIR, any changes in population density, distribution, or growth rate is considered a significant impact.

Implementation of the proposed General Plan would result in an increase of 3,524 persons over the existing 1989 population of 4,386 (2.1 persons per household multiplied by future housing units, 1,678). The proposed General Plan would increase the population overall by 80.3% to a level of 7,910 in the year 2010. Annually, the growth rate would equal approximately 4.0%.

Population growth in itself is not considered an impact. Factors associated with population growth such as, but not limited to, traffic, noise, air quality, housing, and public services and utilities may be considered impacts. These impacts are discussed in their respective sections of this EIR.

CUMULATIVE IMPACTS

In conjunction with past, present, and reasonably foreseeable development projects, General Plan buildout will contribute to regional population growth. Additional regional population growth will result in indirect impacts to traffic, noise, air quality, housing, and public services as described above. These issues are considered in their respective sections of this EIR.

MITIGATION MEASURES

None proposed. No significant project-specific population impacts have been identified.

LEVEL OF SIGNIFICANCE

The addition of population is not a significant impact. Indirect project-specific and cumulative impacts of population growth on traffic, noise, air quality, housing and public services and utilities are discussed in their respective sections of this EIR.

HOUSING

EXISTING CONDITIONS

The documentation of housing needs and characteristics presents data for the incorporated limits and study area as described in the Regional and Local Setting of this document. The U.S. Bureau of the Census has defined one Census Tract for the City, 2020. The Tract boundaries are coterminous with the City's incorporated limits and Sphere of Influence. Census Tract 2019 surrounds Tract 2020 on all sides. Information on Tract 2019 will be considered in the analysis, as a portion is in the Study Area.

The Calistoga Study Area is located in Napa County's most prominent geographic feature, the Napa Valley. In addition to the City of Calistoga, the Valley contains three other incorporated jurisdictions: St. Helena, Yountville, and Napa. Urban development is generally concentrated in these cities.

The County's housing market is dominated by the Valley's largest urban area, the City of Napa and its urban fringe. Overall, in 1980, the City of Calistoga accounted for approximately 7% of the total County housing stock in Napa County. The City of Napa accounted for about 80% of the County housing stock.

Housing Stock

Over time, the City of Calistoga's housing stock has increased substantially. Table H presents the change in population, housing units, and household size for the period 1960 to 1989. The largest increase in housing units, 77%, coincides with the largest increase in population, 106%, which took place between 1970 and 1980. Household size has generally decreased over the last 29 years to a present level of 2.13. In 1980, there were approximately 1,825 households in Calistoga (1980 U.S. Census). Exhibit 8 presents a bar graph of the increase in units since 1960.

In 1980, The City contained approximately 1,964 housing units. 1,904 of the units were year-round housing units. In January 1989, the number of units increased to 2,074 with 2,022 being occupied on a year-round basis. Table I summarizes the number of housing units by type in 1980 and in 1989 the most recent estimate for the City. As the housing unit figures indicate, the City of Calistoga contains a variety of housing types with a dominance of single family dwellings.

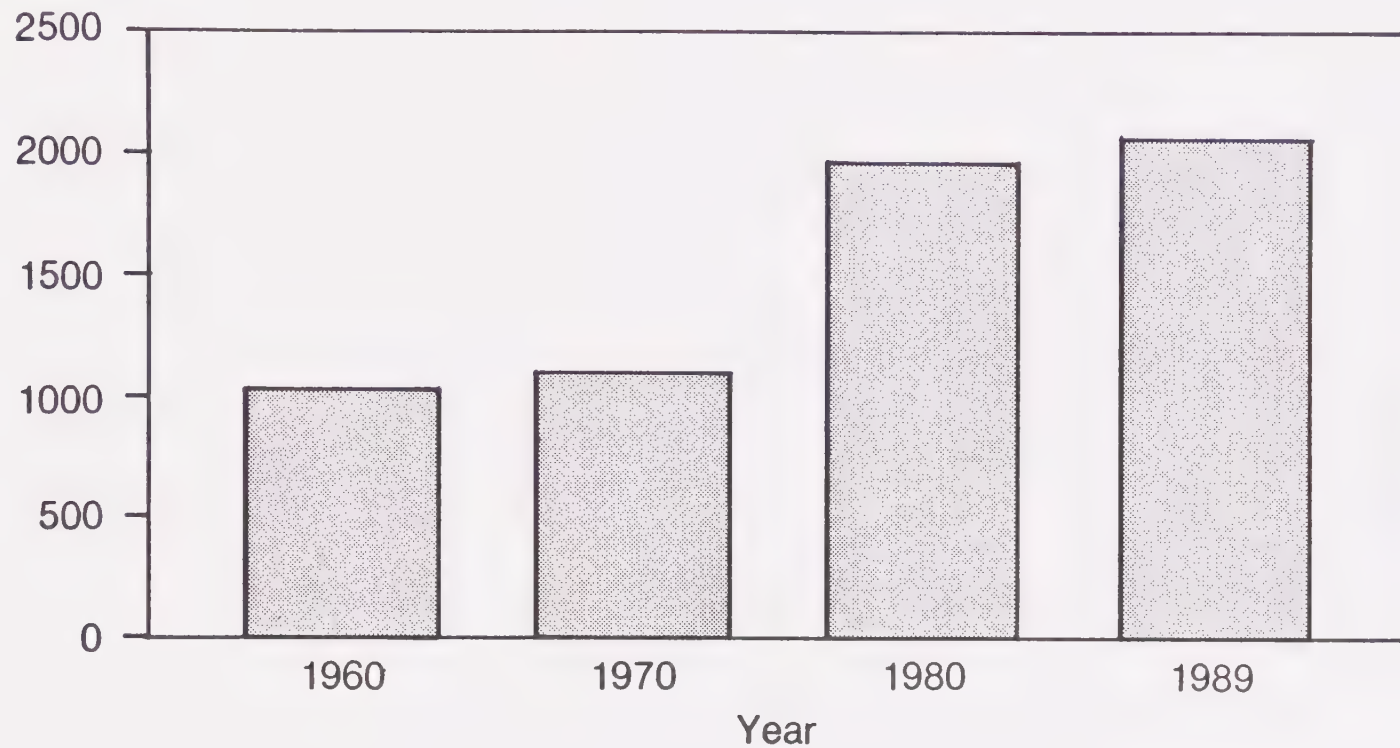
Census Tract 2019 contained a smaller amount of housing units in 1980 though it occupies a larger area. Table I summarizes the unit types for Tract 2019. A predominance of single family units also exist in Tract 2019.

TABLE H
POPULATION AND HOUSING INCREASES

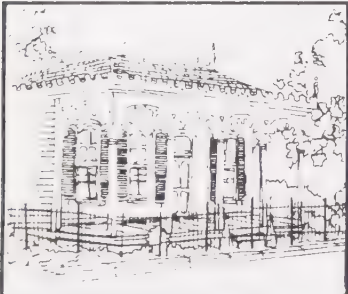
Characteristic	1960	1970	% Change	1980	% Change	1989	% Change
Population	1,514	1,882	24%	3,879	106%	4,386	13%
Household Size	2.54	2.69	6%	2.12	-21%	2.13	.5%
Housing Units	1,042	1,106	6%	1,964	77%	2,074	5.6%

Sources: 1960, 1970 and 1980 U.S. Census
California Department of Finance, January 1989

Number of Housing Units



Source: US Census & California Department of Finance



HOUSING BAR GRAPH

GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT
City of Calistoga



Exhibit 8

TABLE I
HOUSING CHARACTERISTICS SUMMARY

CHARACTERISTIC	TRACT 2020		TRACT 2019 1980
	1980	1989	
Housing Units Total	1,964	2,074	
Single-Family	1,085	1,210	452
2 to 4-Plex	123	103	89
Multi-Family (5+)	270	313	11
Mobile Home	426	448	---
Owner-Occupied Units	1,090	N/A	348
Renter-Occupied Units	701	N/A	135
Length of Residence	2-5 yrs.	N/A	2-5 yrs.
Overcrowding (1.01 + per room)	125	N/A	20
Median Income	10,873	N/A	20,437

Sources: 1980 U.S. Census
 1989 Department of Finance

Note: N/A = Not Available

New construction within Calistoga was minimal between 1982 to 1985 due to the moratorium on water and sewer hook-ups. During 1987 to 1988, 31 single family units were built. The number and type of units built in the 1988 to 1989 year include nine single family detached homes and one 4-plex structure.

Household Characteristics

Tenure and Length of Residence

Table I summarizes tenure and length of residence, and overcrowding for the planning area. A majority of residents in 1980 were fairly recent arrivals to the City of Calistoga and surrounding area, with most households having a length of residence between two and five years. A majority of the units are owner-occupied in both tracts.

Overcrowding

The Census defines overcrowding as more than 1 person per room. Approximately 7% of a total 1,791 occupied housing units in Tract 2020 reported more than 1.01 person per room. Of 483 occupied housing units, 4% reported more than 1.01 persons per room in Tract 2019.

Household Financial Characteristics

As Table I indicates, the median income for Tract 2020 and Tract 2019 differed in 1980. The median income for the City of Calistoga equalled approximately half of the median income of Tract 2019, \$10,873 versus \$20,437. The May 1989 income estimate for Napa County equals \$38,800.

A household classified as very low income earns 50% of the median income. A low income household earns between 50% and 80% of the median income. A moderate income household earns between 80% and 120% of the median income. Table J indicates the percentages of households in the City in each income category. As indicated, the largest income group in the City consists of very low income households, 48%.

According to State law, a lower-income household that pays more than 25% of its income for housing is living in unaffordable housing. The federal government's measure of overpayment is 30% of a household's income. ABAG has calculated the percentages of low income homeowners and renters that are overpaying for housing based on the 1980 Census. Table J indicates that 22% of Calistoga's low income homeowners are overpaying for housing services. In addition, 68% of the City's low income renters are overpaying for housing services.

TABLE J

FINANCIAL CHARACTERISTICS TRACT 2020

CHARACTERISTIC	NUMBER
Income Proportions	
Very Low	48%
Low	19%
Moderate	17%
Above Moderate	16%
Proportion of Low Income	
Owners Overpaying	.22
Proportion of Low Income	
Renter Overpaying	.68

Source: ABAG Housing Needs Determinations, September 1988

The median contract rent equalled \$185 in 1980. Current rental prices range from a minimum of \$375 to \$1,000 a month for an average to upgraded unit. Local Calistoga realtors describe the rental unit market as "tight." Units are usually rented quickly.

Values of single family homes have risen since the 1980 Census. The median value of owner occupied units in the City equalled \$77,000 in 1980. A current price estimate (October, 1989) provided by St. Helena Realty is as follows:

3 Bedroom/2 Bath Home	\$155,000 to 165,000
-----------------------	----------------------

Rents and current selling prices are not directly comparable to Census figures which did not specify rents and values for different sizes and types of units.

Special Needs Groups

The General Plan Update MEA detailed the characteristics of special needs groups. These characteristics are summarized on Table K. Handicapped and elderly persons require specialized public services. The elderly, farmworkers, and female heads of households sometimes require affordable and larger housing units.

Housing Stock Conditions

Table L summarizes housing stock conditions for the planning area. A majority of the units were constructed subsequent to 1960, approximately 59% for Tract 2020 and 47% for Tract 2019. Units lacking heating fuel were few, approximately .5% in Tract 2020. Units lacking complete plumbing for exclusive use equalled approximately 1% of all year round units in both Census tracts.

A more recent study in the City of Calistoga indicates that the housing stock condition may still need improvement. In 1984, a Sidewalk Survey was conducted to assess the condition of Calistoga's housing units in a specified target area which contained 1,178 units. 967 or 82% of the units were surveyed. Of the 967 units, 508 units were classified as Substandard Major and Substandard Moderate. This survey was updated through record and field checks in 1987 and included the entire City in the analysis. In 1987, the total number of Major and Moderate Substandard units in the target area equalled 542.

A demographic survey of the substandard units was carried out in 1987. Of the 542 units identified as substandard, 210 were given questionnaires. Results are presented in Table M. Approximately 25 homes lacked heat. In addition, many homes cited other building problems concerning plumbing, wiring and foundation among others. The results of this survey are not directly comparable to Census figures since the total number of respondents, 210, is a small fraction of the total households in the City. Survey results are, however, a more recent indicator of housing stock condition.

TABLE K
SPECIAL NEEDS GROUPS
TRACT 2020

GROUP	NUMBER
Handicapped	
Public Transportation	100
Work Disability	44
Elderly	
60 years +	1,572
Farmworkers	
Employed in Farming, Forestry, and Fishing	225
Migrant Farmworkers	300-400 during harvest
Female Heads of Households	98
Homeless	40 +/-year

Sources: 1980 U.S. Census
 Ernest Volkman, November 1989

TABLE L
HOUSING STOCK CHARACTERISTICS

	TRACT 2020	TRACT 2019
CHARACTERISTIC	1980	1980
Year Structure Built		
1939 and earlier	367	148
1940 to 1959	415	142
1960 to 1979	1,122	262
Units Lacking Heating Fuel	8	--
Lacking Complete Plumbing for Exclusive Use (Year Round)	22	6

Source: 1980 U.S. Census

TABLE M

1987 SURVEY RESULTS, CITY OF CALISTOGA
HOUSING STOCK CHARACTERISTICS (1)

CHARACTERISTIC	NUMBER OF SURVEY RESPONDENTS
Homes without Heat	25
Building Problems	
Plumbing	51
Wiring	45
Walls	52
Roof	48
Foundation	38
Insulation	64
Heating System	66
Stairway	32
Windows	40
Doors	53
Need More Room	78

Source: City of Calistoga Housing Rehabilitation Department Updated Demographic Survey, March 1987

Note:

(1) Total of 210 responses to the Survey.

The City maintains a housing rehabilitation program funded by the California Community Development Block Grant program. The grants are awarded based on need. The Sidewalk Survey and Demographic Survey demonstrated the City's need to upgrade many units.

On April 12, 1989, the Daily Calistogan reported that during the period of June 1985 to December 1988, approximately \$579,000 was spent to rehabilitate 22 units. Of these, half of the homeowners were classified as low income. 52% of the low income group were Hispanic and 47% were female heads of households. One percent of the applicants were classified as handicapped.

Overall, the Program has rehabilitated approximately 112 units since its beginning in 1984. Property owners of rental units must agree to rent to low and moderate income households for the term of the loan, usually 15 years. Most of the eligible units have been rehabilitated. Over the life of the program, 125 houses will be renovated (Daily Calistogan, April 7, 1989). The program will reduce in intensity in June of 1990 since additional grants from the State of California are not anticipated (Richard Spitler, Planning and Public Works Director, November 7, 1989).

Demolitions have been few in the last two years. In 1988, nine structures which housed 26 units were demolished. In 1987, one single family detached unit was demolished and 7 units in the 2 to 4 plex unit type were demolished. This information was provided by the California Department of Finance. Calistoga's Housing Department reports that in November 1988, 32 substandard units were demolished which displaced 150 people. Those displaced have been assimilated slowly (phone interview, Pat Rusch, October 6, 1989).

Vacancy Rates

The current overall vacancy rate for the City in 1989 equals 2.51% according to the Department of Finance. The vacancy rate includes seasonally occupied units which may tend to inflate the vacancy rate.

Current (1989) vacancy rates for rental units in Calistoga equal less than 1% according to Saunders Real Estate. This is the vacancy rate for the 60 units that the office manages. The office never has a vacancy for more than two weeks. Mt. St. Helena Realty manages 20 units of which less than 5% are vacant at a maximum at any one time. These units are also rented very quickly. Vacancy rates for all rental units in the City are not available.

Though rental vacancy rates are low overall, seasonally it may vary. Vacancy rates tend to be higher in December. The housing market is driven in part by transient workers (phone interview, Robert Beck & Taylor, Napa Valley Realty, November 21, 1989).

Resource Management System

The City adopted a Resource Management System (RMS) in 1984 and has periodically amended it, most recently in June 1987. Currently an amendment is under consideration by the City. The RMS has served as a method to control residential, commercial, and industrial growth in order to respond to the water and wastewater facility shortages. It establishes a schedule of water consumption for proposed developments. Assuming current water consumption rates and sewage treatment capacity problems, 54 dwelling units a year can be constructed accommodating approximately 115 persons using current household size figures.

The current RMS provides allowances for low to moderate and senior housing project bonuses through three methods. One, a twenty-five percent density bonus may be granted along with waiver of the one-time water connection fees, water treatment fees or building permit fees. All other fees are to be paid in full. Two, a reduction of twenty-five percent of one-time water treatment development and building permit fees may be granted. Three, mother-in-law or second unit conversions/constructions may pay reduced water development service connection fees (50% reduction) and no sewer development fees.

The proposed RMS amendment will provide the following fee reductions for affordable housing: the City may grant a twenty-five percent (25%) reduction in the water and sewer development fees; and, granny unit or second unit conversions/constructions may receive a fifty percent (50%) reduction in water development service connection fees and sewer development fees.

Inclusionary Housing Program

The most significant fee related to the production of affordable housing is the City's recent Inclusionary Housing Program. In response to the recognition that little or no new affordable housing has been built in the City, the City Council directed Planning Staff to prepare an Inclusionary Housing Program. All new residential projects of five or more units are required to address affordable housing in one of the following ways:

- 10% of the units for rent shall have rents affordable to very low and low income households (i.e. income levels that do not exceed 80% of the median income); 10% of ownership units shall be affordable to households with incomes below 120% of the County median income, or;
- A portion of the land of any new residential project shall be dedicated to the City for use as a site for affordable housing, or;
- An in-lieu fee, related to the cost of providing affordable housing, shall be offered to the City, or;

- Reasonable alternative methods - the City will entertain from housing developers offers of alternative measures to provide affordable housing in their projects.

The in-lieu fee is established at \$18,350 for each required affordable housing unit in any given project. The fee is the difference between the total construction cost to build the unit and the estimated affordable housing purchase price. Fees acquired through this program will be placed in a separate Housing Trust Fund to be used exclusively for affordable housing development. It is estimated that a new modest single family unit cost \$137,000.00 to construct.

The program allows the developer to meet the affordable housing objectives in the community in many ways. Examples include:

- construction of affordable housing units in the project
- construction of affordable housing units outside the project (i.e., developers could donate time, material, and labor to construct units on other affordable housing sites)
- donation of units to the City (i.e., the Developer could donate a certain number of units to the housing authority who, in turn could either rent or sell the units to qualified families)
- provide in-lieu fees to the City

This program in conjunction with other incentives to providing affordable housing will help increase the affordable housing stock in the City.

Projected Housing Needs

In January 1989, the Association of Bay Area Governments (ABAG) published its assessment of Regional Housing Needs. The existing need for housing in Calistoga is 28 units. Six factors are assumed in ABAG's estimate of existing and projected need:

- Market Demand for Housing
- Employment Opportunities
- Availability of Suitable Sites and Public Facilities
- Commuting Patterns

- Type and Tenure of Housing
- Housing Needs of Farmworkers

The calculation of existing housing need is the difference between the number of units actually available in the jurisdiction and the number that should have been available based on an optimal vacancy rate. The "optimal" rate assumed by ABAG is 4.5%. This rate is a goal for the Bay Area Region.

Calistoga's housing needs were originally estimated at 493 units. ABAG's calculations were based on the assumption that infrastructure constraints to growth would be resolved by 1990 which has not occurred. Upon receipt of ABAG's September 1988 Housing Needs Determinations (which were based on Projections '87), the City analyzed water and sewer infrastructure constraints. It was shown that future annual water allocations limit construction of housing to 54 units per year until 1995 (memo, Richard Spitler, Planning Director, to City Council, November 30, 1988). Based on this analysis, estimates of housing need were lowered to 310 units. In their revised January 1989 Housing Needs Determination, ABAG accepted this reduced figure.

Table N provides a breakdown of the projected need by time frames. The 1988-90 projected need is 29 units. The 1990-95 projected need equals 281.

As discussed previously new construction in the City included nine single family detached units and one 4-plex structure. Of these units none is considered affordable. The number of units that must be provided in each income category is listed on Table O. As indicated, the majority of units must be provided for very low income households and above moderate income households, 99 and 93 units respectively.

IMPACTS

For the purposes of this EIR, both a limitation of housing development or an inducement of housing demand are considered significant impacts.

The implementation of the proposed Land Use Plan will allow for the development of 1,678 dwelling units over the next 20 years. This is a "worst-case" scenario. Though the build-out estimates are based upon a land use survey, it is highly unlikely that full development potential will be achieved. Reasons for the lack of achievement include: individual site constraints not recognized in the survey; individual land owner decisions not to develop the property to its fullest potential; and, discretionary permit approvals which may reduce the density of development.

TABLE N
EXISTING AND PROJECTED HOUSING NEEDS
CITY OF CALISTOGA

TIME FRAME	NEED
Existing Need	28
1988-90 Projected Need	29
1990-95 Projected Need	281
TOTAL PROJECTED NEED	310

Source: ABAG, Housing Projections, January 1989

TABLE O
PROJECTED HOUSING NEED BY INCOME CATEGORY

CATEGORY	NUMBER OF UNITS
Very Low	99
Low	56
Moderate	62
Above Moderate	93

Source: ABAG, Housing Projections, January 1989

The development of land with residential units will impact public services and utilities by creating a demand for additional water, wastewater treatment, gas, electricity, telephone, and other services and utilities. These impacts are discussed in the Public Services and Utilities section of this EIR.

Additional residential units and the resulting population will also create traffic impacts. Increased traffic will contribute to air quality degradation, and traffic noise. These issues are addressed in their respective sections in this EIR.

The construction of the housing units may result in short-term noise, air quality, and earth/soils impacts. Please refer to the Noise and Air Quality sections for a discussion of these topics. Earth and soils impacts are discussed in the Initial Study prepared prior to the EIR. Earth and soils impacts will be discussed on a project-specific basis as individual projects are proposed under the Land Use Plan.

At 54 units per year, the City will potentially not meet their fair share allocation for 1990 - 1995 assuming that existing constraints remain. This is considered a significant impact. Mitigation measures can reduce this impact to a level of insignificance.

Overall, the creation of employment opportunities will result in a demand for 1,678 units. Build-out of the Land Use Plan will not meet estimated housing demand, allowing a shortfall of 210 dwelling units.

A shortfall of dwelling units for future employees could create a mild jobs-housing imbalance. A jobs-housing imbalance occurs when employees cannot find affordable housing near the place of their employment (in this case, within or immediately adjacent to the city of Calistoga). A jobs-housing imbalance may lead to increased traffic congestion, increased air quality impacts, and an increased demand for housing units leading to lower vacancy rates and higher housing rents and sale prices. This is considered a significant impact. Mitigation measures can reduce this impact to a level of insignificance.

Though a jobs-housing relationship may be defined for a larger inter-related area such as the San Francisco Bay Area, a jobs-housing relationship may be approached at a naturally-defined community level (California Department of Housing and Community Development, Jobs-Housing Balance Issue Paper, December 1987). The City of Calistoga is a well-defined community in the Napa Valley since it is only one of four incorporated communities. The impacts of increased employment opportunities and lack of housing is described below. Issues related to traffic and air quality are described in their respective sections in this EIR.

Recent vacancy rates show that the Calistoga housing market is "tight." Units are sold and rented quickly. The overall vacancy rate for single-family and multi-family units equalled

2.51% in 1989. Depending on the rate of development of housing units under the proposed plan, vacancy rates may improve for a period of time. When build-out occurs, the short-fall of dwelling units will result in impacts similar to those presently experienced in the City.

Currently, housing sales prices are beyond the reach of many low and moderate income households. (City of Calistoga General Plan Volume I: MEA and Issues and Options). As fewer and fewer units are available for rent or purchase, prices of existing dwelling units may rise. Depending on the income of the City's residents, housing may become unaffordable. This would, in particular, affect special needs groups such as the elderly, farmworkers, handicapped, large families, single-parent households, and others.

Given infrastructure constraints, it is anticipated that only 54 dwelling units per year will be built between 1990 and 1995. Under best-case assumptions, 5.5 affordable units will be built under the Inclusionary Housing Ordinance. Under worst-case assumptions, the collection of in-lieu fees (18,350 x 5.5 units) would result in a total of \$100,925. Given that a unit costs approximately \$137,000 to construct, the fees collected under projected development conditions would be insufficient to build one affordable unit per year. This is considered a significant impact. Local funds will need to be supplemented with State and Federal funds as listed in proposed mitigation measures. Mitigation measures will reduce impacts to a level of insignificance.

Under State law, if a developer agrees or proposes to construct at least:

- 1) 20 percent of the total units of a housing development for lower income households;
- 2) 10 percent of the total units of a housing development for very low income households; or,
- 3) 50 percent of the total dwelling units of a housing development for qualifying residents,

the City must grant a density bonus of 25 percent over the maximum allowable density of the zone and provide at least one other concession or incentive such as a reduction in site development or zoning standards, approval of mixed use zoning, or another incentive which would provide cost reductions (Government Code Section 65915 and 65917). This requirement applies to any housing development of five or more units. If a density bonus and other incentives are not granted, the City must make written findings according to statute guidelines.

Targeting density bonuses at the proposed "adequate sites" in Exhibit 9 as well as other sites, the jobs/housing imbalance would be alleviated. If a 25 percent increase in density



Source: City of Calistoga

ADEQUATE HOUSING SITES MAP

GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT
City of Calistoga

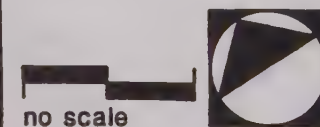


Exhibit 9

were approved for all MDR and HDR designated lands, then there would be an increase in potential housing units. This would meet and surpass the housing imbalance need of 210 units.

CUMULATIVE IMPACTS

The jobs/housing imbalance, if unmitigated, could contribute cumulatively to a regional jobs-housing imbalance if other communities emphasize employment-generating uses over housing.

MITIGATION MEASURES

27. Through corporate and police powers the City shall make every effort to meet its fair share of housing as determined by ABAG.
28. The City shall make use of governmental programs related to construction and rehabilitation needs of low and moderate income households. The City shall apply for and/or make applications available to the public. Funding sources include, but are not limited to:

FEDERAL (FmHA)

- FmHA Section 502 - Rural Housing Home Improvement Loan Program. Provides loans to low income households to buy, build, improve, repair, or rehabilitate owner occupied rural homes.
- Section 504 - Rural Housing Repairs Program. Provides loans and grants to very low income persons to make repairs necessary for health and safety.
- Section 523 - Self-Help Housing. Provides grants and loans to fund technical assistance to groups building units financed under 502.
- Section 523/524 - Rural Housing Sites Loan Program. Provides direct loans to private or public non-profit organizations to acquire and develop land in rural areas.

STATE

- California Self Help Housing Program. Through grants and loans to local governments and non-profit organizations, this program helps low and moderate income families construct or rehabilitate their homes.

- Predevelopment Loan Program. Low interest loans to local governments and non-profit organizations for predevelopment activities.
- Nonprofit Housing Program. The California Housing Finance Agency (CHFA) provides permanent financing for contractor-built single-family homes developed by nonprofit organizations which serve lower income families.
- Minority and Small Business Development. CHFA assists minority-owned and women-owned developers.

LOCAL

- Inclusionary Housing Program. All new residential units - five or more are required to address affordable housing through providing 10% of the units as affordable to very low, low, and moderate income households, land dedication, in-lieu fee, or reasonable alternative method.
 - Make use of repayment funds from C.D.B.G. Rehabilitation board to facilitate retention, repair, and development of affordable housing units.
29. The City shall ensure that all rental property owners allow the use of Section 8 rental assistance certificates.
 30. The City shall amend the Zoning Code to grant residential density use bonuses for very low and/or low income in order to comply with Government Code Sections 65913.4, 65915, and 65917.
 31. The City shall continue to implement the provisions of the Second Dwelling Units Chapter (17.37) of the City Zoning Code.
 32. The City shall keep a list of all available and appropriate federal, state, and local funding sources that support rental housing units. The City shall apply and/or provide applications to the following programs:

FEDERAL (FmHA)

- Section 515 - Rural Rental Housing Program. Provides loans to construct and rehabilitate rental and cooperative housing for low and moderate income families and elderly persons.

STATE

- Rental Housing Construction Program. Provides loans to local governments for the development of rental housing.
- The City shall apply for Proposition 77 and 84 funds for rehabilitation and construction of rental units.

LOCAL

- Inclusionary Housing Program. All new residential units - five or more are required to address affordable housing through providing 10% of the units as affordable to very low and low income households, land dedication, in-lieu fee, or reasonable alternative method.
33. The City shall encourage mixed-use development through its Zoning Ordinance.
 34. The City shall establish a housing impact fee for new businesses to help house employees for low- salaried positions.
 35. The City shall keep a list of all available state and regional programs that support housing for special need groups. The City shall apply and/or provide applications to the public. The City shall work with HCD and apply for the following programs:
 - Emergency Shelter Program - Awards grants to local governments and non-profit organizations for actively aiding the homeless.
 - Senior Citizens Shared Housing Program - Provides grants to local governments and non-profit organizations helping seniors find others with whom they can share housing.
 - Office of Migrant Services - Awards grants to local governments for administration, management, operation, and rehabilitation of rental housing units for migrant families.
 - Farm Labor Housing Rehabilitation Loan Program. Provides loans to the owners of farm labor housing to bring it into compliance with the Employers Housing Act.
 - Housing Assistance Program - Provides Section 8 certificates to developmentally, mentally, and physically disabled adults. The Napa Valley Housing Authority distributes Section 8 rental certificates.

36. The City, alone or in conjunction with the County, shall investigate California Debt Limit Allocation Committee requirements for issuance of tax-exempt Mortgage Revenue Bonds (MRBs). If feasible, the City and/or County shall apply to the Committee for allocation of MRBs.
37. The City shall provide information to developers and the public regarding the California Housing Finance Agency's (CHFA) bond financing program.
38. The City, alone or in conjunction with the County, shall contact the California Debt Advisory Commission and investigate requirements to obtain authority for the issuance of Mortgage Credit Certificates (MCCs). The City and/or County shall work with local and real estate agencies and lenders to implement a MCC program.
39. The City shall rezone a significant amount of land designated by the Zoning Code for Transitional uses to residential uses. Through the Zoning Code, the City shall allow limited residential units in commercial districts provided it can be done in a compatible manner.
40. The City shall consider rezoning lands designated for commercial and industrial uses with mixed uses in order to accommodate projected housing needs.
41. In accordance with Section 65852.3 and 65852.4 of the Government Code, the City shall revise its Zoning Code to allow manufactured homes in single-family zones.
42. In accordance with Sections 65852.7 of the Government Code, the City shall amend its Zoning Code to allow mobilehome parks on all land planned and zoned for residential uses.
43. In accordance with Section 65583(c)(1) of the Government Code, the City shall amend its Zoning Code to provide for the possibility of emergency and transitional shelters, should the need occur. Potential sites are shown on the Adequate Sites Map.
44. The City shall maintain a list that provides information on approved and proposed projects, especially projects which include rental housing. This list shall be made available to the public.
45. The City shall designate a housing coordinator to work with the Planning Department and/or with the City Administrator. Responsibilities of the housing coordinator shall include, but are not limited to, developing a pilot program to package housing incentives and funding sources aimed at developing affordable housing, farmworker housing, emergency shelters, and other types of housing. The

coordinator shall also make recommendations for use of the City's CDBG repayment funds to the City Council.

46. The City shall review its Capital Improvement Program annually to ensure that sewer/water/street improvements facilitate timely residential development.
47. The City shall review previous redevelopment studies and consider encouraging the formation of a special assessment district in the "lower Washington" area. Funds from the assessment could fund long-term rehabilitation and property upgrading programs for existing properties and structures.

- OR -

The City shall reinitiate efforts to prepare and implement a redevelopment plan for the "lower Washington area" of Calistoga, if feasible. The plan will consider replacing older multi-family units with new multi-family units for very low to low income households.

48. The City shall make use of governmental programs listed in Implementing Program 3 under Goal A of the Housing Element. In addition, the City shall apply for and/or provide applications for the following programs:

FEDERAL (FmHA)

- 533 - Rural Preservation Grant Program. Funds non-profit organizations to rehabilitate older rural homes for very low and low income families.

STATE

- Special User Housing Rehabilitation Program. Offers loans for rehabilitating residential, hotels, and other housing occupied by the elderly, disabled, and low income persons.
 - Deferred Payment Rehabilitation Loan Program. Provides loans to local governments to assist with the rehabilitation of housing for low and moderate income households.
49. The City shall annually update its Capital Improvements Plan to ensure that municipal systems are in good repair.
 50. The City shall continue to enforce the provisions of the City Municipal Code and resolutions in order to maintain existing mobilehome parks.

51. The City shall amend the Zoning Code to be consistent with the General Plan Land Use Plan (diagram).
52. The City shall review all loan agreements for housing assistance to ensure clauses are included which require unit owners to retain the families that occupied the units prior to rehabilitation, unless adequate cause can be shown.
53. The City shall amend their Zoning Code to regulate the placement of Bed and Breakfast establishments in residential neighborhoods. The amendment shall regulate minimum spacing and location next to local streets to prevent the proliferation of nonresidential uses in residential neighborhoods.
54. The City shall enact an ordinance requiring loan recipients to give one-year advance notice to the City of potential conversions to market rate units.
55. Through its Inclusionary Housing Program, the City shall assist non-profit housing corporations in purchasing subsidy termination units.
56. The City shall amend its Subdivision Ordinance and Zoning Ordinance to comply with the State Subdivision Map Act.
57. The City shall implement a fast-track application procedure for projects that include residential development, especially projects that include affordable housing.
58. The City shall continue to reduce, waive, or allow deferred payments Resource Management System fees for second units, senior housing, and very low to low income housing projects.
59. The City shall promote higher density and infill development.

LEVEL OF SIGNIFICANCE

No insignificant project-specific impacts have been identified. The following impacts have been identified that can be mitigated to a level of insignificance: existing infrastructure constraints may impact the City's ability to meet its fair share housing allocations for 1990-1995; the potential for a jobs/housing imbalance; and the availability of affordable housing for low and moderate income households. Through implementation of the above mitigation measures, the project will not contribute to a cumulative jobs/housing imbalance on a regional level.

TRAFFIC AND CIRCULATION

INTRODUCTION

The Traffic and Circulation section is a summary of information provided in the Traffic Analysis and Circulation System Assessment General Plan Update (March 1990), prepared by Allan G. Tilton. This technical report contained in Appendix C.

EXISTING CONDITIONS

Vehicular Transportation

Circulation System

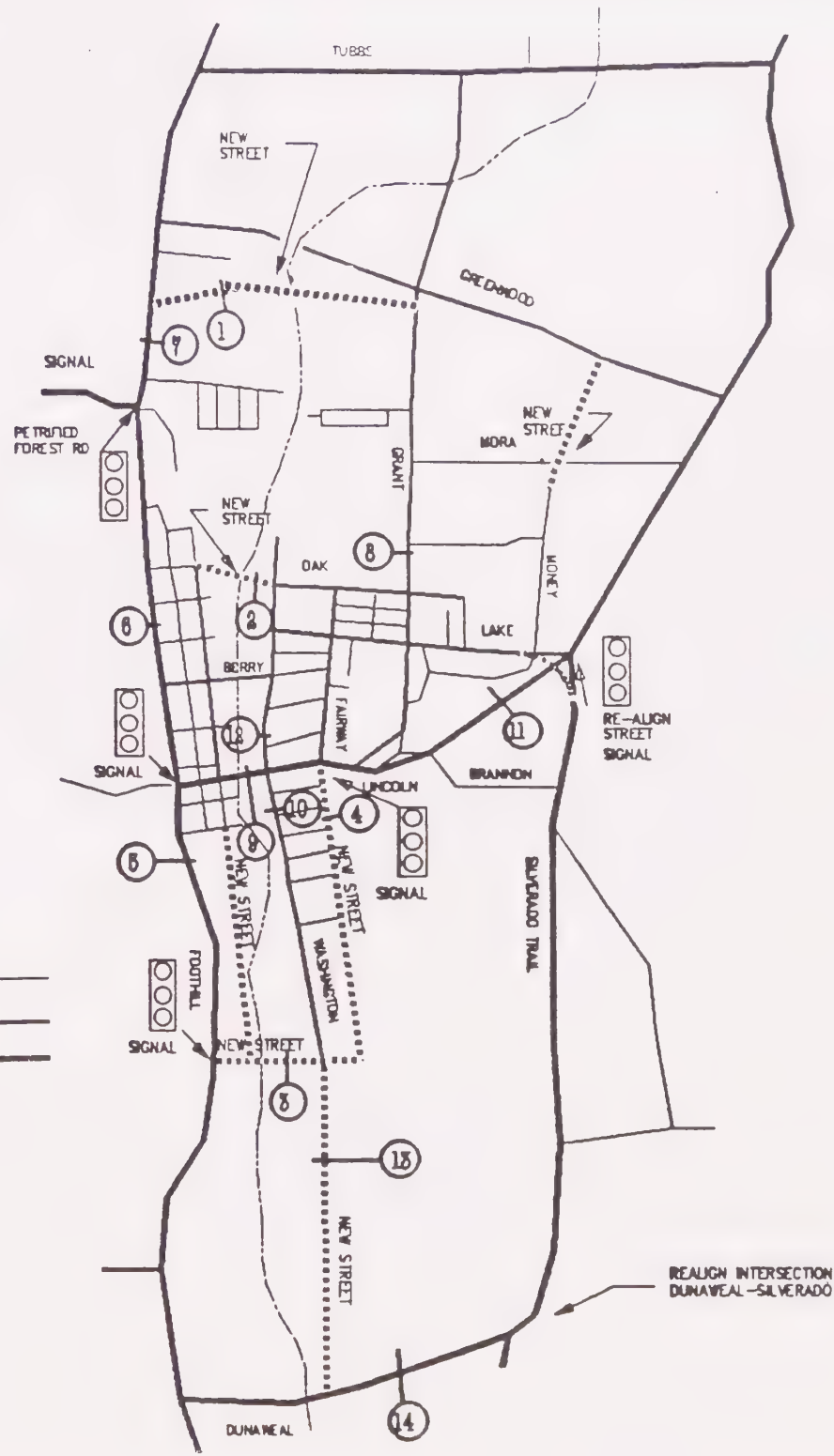
The existing circulation system in the City of Calistoga and its surrounding County areas has been influenced by two geographical features. These features include mountainous terrain and the Napa River which traverses the area from west to east.

The existing circulation system within the Study Area consists of two nearly parallel east/west roadways; Foothill Boulevard/State Route 128 and Silverado Trail/State Route 29. Principal north/south streets and roadways are Tubbs Lane, Lincoln Avenue (State Route 29) and Dunaweal Lane. A dense grid street system serves the central core area of the City. Beyond the downtown core area the street and roadway network becomes rural in character. Please refer to Exhibit 10 for a map of the City of Calistoga circulation system.

All State Highways, County roadways and City streets have two travel lanes. Traffic volumes on State Highway 29 and State Highway 128 are higher than on City streets. The intersection of Lincoln Avenue (State Route 29) and Washington Street is signalized.

Street Classifications

The City street network is comprised of several street types and classifications. Street systems (networks) include local streets which serve as access to individual properties, arterial streets which serve the movement of vehicles, and collector streets which serve as a transition between local and arterial streets. Arterial, collector and local streets serve different functions within the circulation network and have different design requirements. Please refer to Exhibits 11 through 14.



KEY

- LOCAL STREETS
- COLLECTOR STREETS
- ARTERIAL STREETS
- FOOTPATH
- SIGNAL

CIRCULATION IMPROVEMENTS

GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT
City of Calistoga

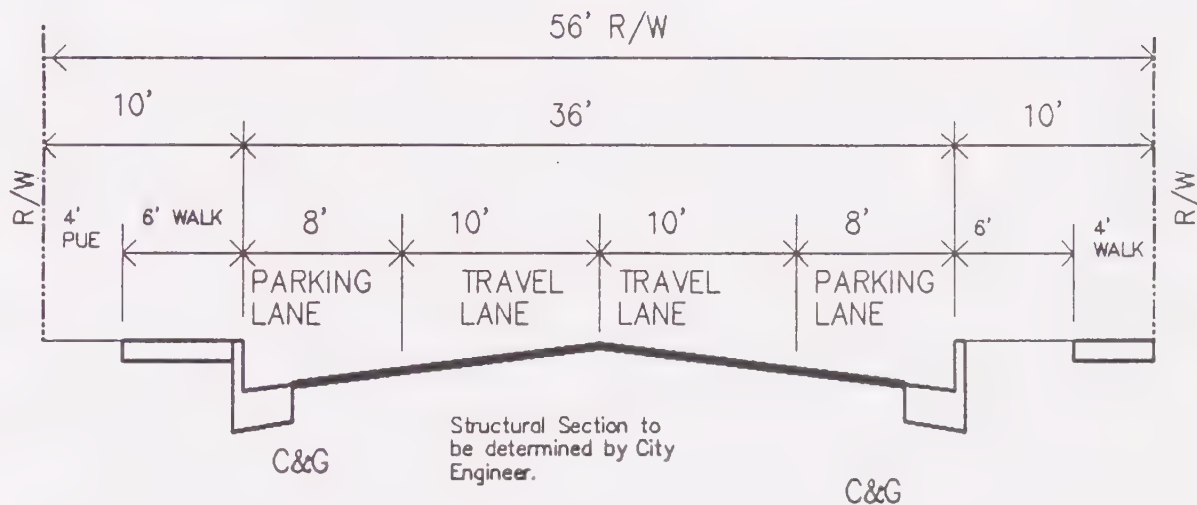
STA inc.



no scale



Exhibit 10



NOTES:

Actual Local street cross-section can be subject to parking provisions as specified with a Specific Plan.

Source: Allan G. Tilton



LOCAL STREET SECTION

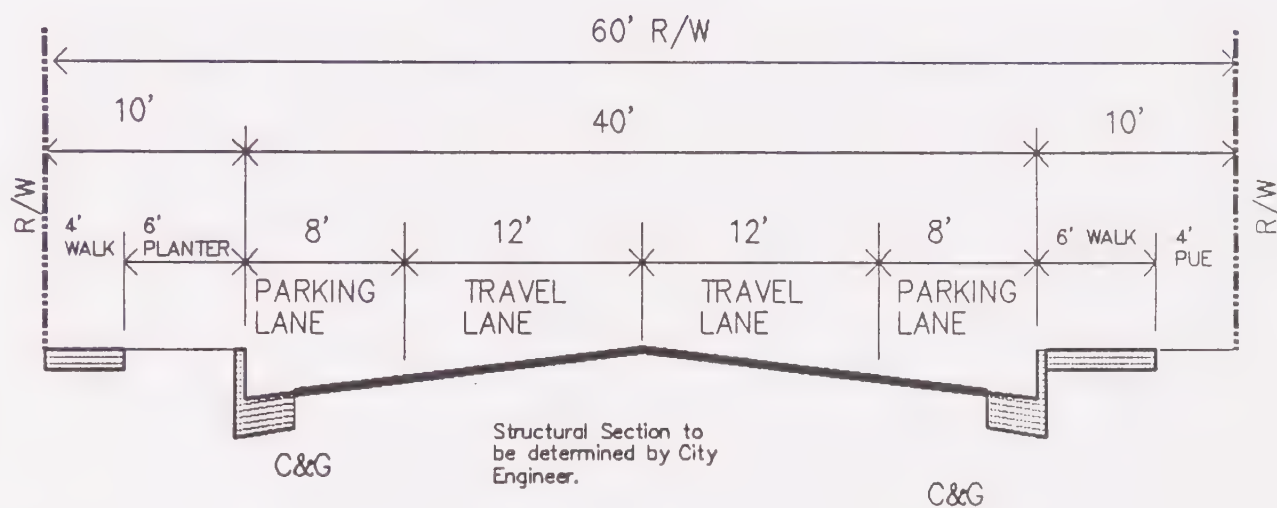
GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT
City of Calistoga

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Exhibit 11



NOTES:

Turn lanes may be provided at intersections with the removal of parking.

Four-foot bicycle lane can be added.

Source: Allan G. Tilton

COLLECTOR STREET SECTION

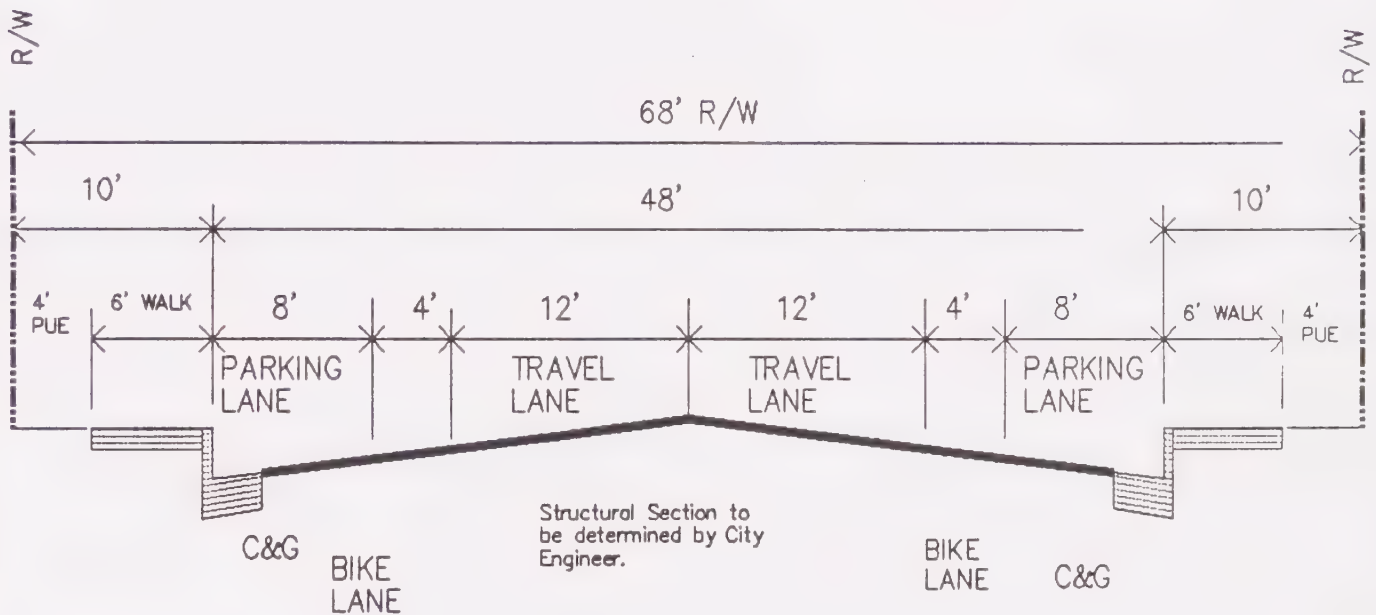
GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT
City of Calistoga

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no scale



Exhibit 12



NOTES:

Turn lanes may be provided at intersections with the removal of parking.

Four-foot bicycle lane can be added.

Source: Allan G. Tilton

MAJOR COLLECTOR STREET SECTION

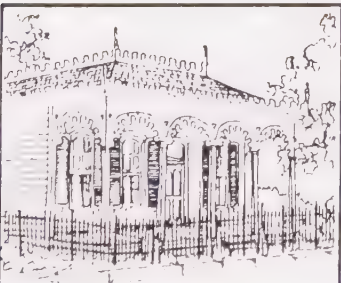
GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT
City of Calistoga

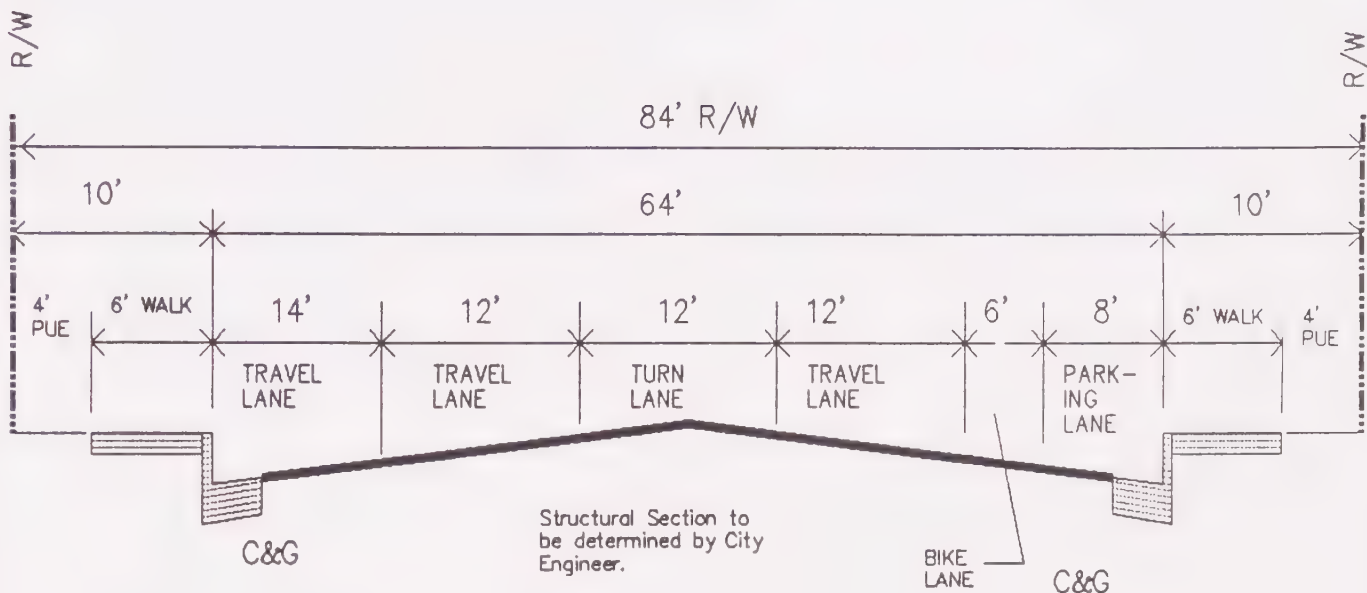
STA inc.

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Exhibit 13





NOTES:

Turn lanes may be provided at intersections with the removal of parking.

Six-foot bicycle lane can be added.

Alternative street lane configuration to be determined by City.

Source: Allan G. Tilton



ARTERIAL STREET SECTION

GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT
City of Calistoga

STA inc.
no scale



Exhibit 14

Street classifications have been assigned to the existing streets. The classification is based upon the functional characteristics that the street emulates. The following are the functional street classifications as determined by Allan G. Tilton, P.E., consulting traffic engineer:

Arterial Streets

Foothill Boulevard/State Route 128
Lincoln Avenue/State Route 29
Silverado Trail
Tubbs Lane
Dunaweal Lane
Petrified Forest Road

Collector Streets

Washington Street	Grant Street
Lake Street	Berry Street
Cedar Street	Oak Street
Brannon Street	Fair Way
Mora Avenue	Greenwood Avenue
Money Lane	

Local Streets

All other streets

Existing Vehicular Traffic

The existing vehicular analysis provides a discussion of noticeable traffic congestion, level of service, peak hour analysis, and circulation improvements. Three areas of noticeable traffic congestion have been observed in the City of Calistoga. The three locations are discussed below.

1. The downtown core area on Lincoln Avenue (State Route 29) between Cedar Street and Fair Way is congested. Congestion at this location is due in part to existing angled parking on Lincoln Avenue, high pedestrian activity, and parking maneuvers.
2. The intersection of Lincoln Avenue at Foothill Boulevard is congested during peak periods of traffic flow. The intersection of Lincoln Avenue at Foothill Boulevard is controlled by a Four-Way STOP sign. High vehicle turning movement volumes, together with limited roadway width, contribute to the congestion at this intersection.

3. The intersection of Foothill Boulevard at Petrified Forest Road is congested during peak periods of traffic flow. The intersection of Foothill Boulevard is controlled by a STOP sign on Petrified Forest Road. Traffic on Petrified Forest Road is required to stop while traffic on Foothill Boulevard is free flowing. High vehicle turning movement volumes, together with limited roadway width, contribute to the perception of congestion at this intersection.

LEVELS OF SERVICE

The concept of levels of service (LOS) is a measure to describe the conditions within a traffic stream and their perception by motorists and passengers. An LOS definition generally describes these conditions in terms of such factors as speed and travel time, delay, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

Six levels of service are defined for each type of facility that is analyzed. They are given letter designations, from A to F, with LOS A representing the best operating conditions and LOS F the worst. Table P gives a description of each level of service.

All intersections within the area are operating at acceptable levels with three exceptions. The intersection of Foothill Boulevard at Petrified Forest Road is operating at LOS E for left turn movements from Petrified Forest Road to Foothill Boulevard. The intersections of Lincoln Avenue at Foothill Boulevard and Lincoln Avenue at Silverado Trail are operating at LOS D each.

Traffic volumes on Berry Street and Lake Street indicate that these streets serve as bypass streets. Local residents use these streets to avoid the congestion which occurs on Lincoln Avenue in the downtown core area.

PEAK HOUR ANALYSIS

The level of service concept is related to traffic during 15 minutes of the peak hour. In the study area there are two peak periods of traffic flow. Average daily trips and peak hour volumes are shown on Table Q. In the morning the peak occurs during the commute hour, 7:30 to 8:30 AM, while the evening peak occurs during the evening commute hour, 4:30 to 5:30 PM. The highest traffic flow occurs during the PM peak hour. For this reason the analysis is done for the evening peak hour traffic conditions.

TABLE P
DESCRIPTION OF LEVELS OF SERVICE FOR STREET SEGMENTS

LEVEL OF SERVICE	VOLUME/ CAPACITY RATIO	ARTERIAL COLLECTOR STREET		LOCAL
		Volume Vehicle Per Hour		
A	.04	92	79	69
B	.16	357	313	270
C	.32	714	626	541
D	.57	1335	1144	989
E	1.00	2340	2305	2181

Source: Allan G. Tilton, P.E. 1990

TABLE Q
EXISTING VOLUMES AND LEVELS OF SERVICE
AT SELECTED STREET SEGMENTS

STREET	DAILY TRAFFIC VOLUME	PEAK HR. VOLUME	LEVEL OF SERVICE
Lincoln Avenue			
Foothill-Cedar	9230	790	D
Cedar-Washington	10150	865	D
Washington-Silverado	8660	735	D
n/o Silverado	5220	650	C
Foothill Boulevard			
Dunaweal-Lincoln	8735	910	D
Lincoln-Berry	7630	795	D
Berry-Pet. Forest	7630	810	D
Pet. Forest-Tubbs	5290	555	C
Silverado Trail			
Dunaweal-Lincoln	2705	250	B
Cedar Street			
e/o Lincoln	810	75	A
Lincoln-Berry	1030	85	B
Berry-Oak	920	90	B
Washington Street			
e/o Lincoln	4275	260	B
Lincoln-Berry	3425	230	B
Berry-Lake	2055	170	B
Lake Street			
Fair Way-Grant	1990	125	B
Grant-Lincoln	1660	140	B

Continued

TABLE Q (Cont.)

EXISTING VOLUMES AND LEVELS OF SERVICE
AT SELECTED STREET SEGMENTS

STREET	DAILY TRAFFIC VOLUME	PEAK HR. VOLUME	LEVEL OF SERVICE
Berry Street			
Foothill-Cedar	1765	145	B
Cedar-Washington	2585	250	B
Grant Street			
Stevenson-Lake	1535	135	B
Lake-Michael	1525	145	B

Source: Allan G. Tilton, March 1990

Note: n/o = north on
e/o = east on

Parking

Parking Supply

The downtown core of the City of Calistoga serves as the commercial, office, and government center of the community. The downtown core consists of the three block segment of Lincoln Avenue between Cedar Street and Stevenson Street.

The downtown core area provides a wide range of commercial enterprises. Commercial activity within the core serves both area residents and visitors. Services which are often associated with daily community activities are found in the downtown core. These activities include grocery stores, pharmacies, hardware and dry goods stores, banks, and governmental services. Tourist-commercial activities include resort hotels, restaurants and specialty shops.

The existing parking supply is inventoried as part of this study. Parking within the downtown core consists of on-street parking, public off-street parking and private off-street parking. Table R summarizes the available parking within the downtown core.

Parking Demand

The downtown core was evaluated to determine parking need. Available retail, commercial and office space has been inventoried. The downtown core currently provides approximately 450,000 square feet of commercial, office and retail space. The parking supply within the downtown core area is approximately 666 spaces.

The City of Calistoga Zoning Ordinance establishes rates for specific land use categories. Commercial off-site parking requirements range from one parking space for each 100 square feet of leasable floor space for restaurants to one space for each 250 square feet of leasable floor space for office uses. Assuming an average parking demand of one space per 200 square feet of leasable floor space, the total downtown parking demand is 2,250 parking spaces. The projected parking shortfall within the downtown core area using City Zoning requirements is 3-to-1.

Parking demand within the downtown core varies by land use categories and by time of day. Large commercial shopping centers provide a wide range of services and commercial opportunities that are similar to the services offered within the downtown core. For the purposes of this analysis it is assumed that the downtown core area corresponds to a large commercial shopping center.

TABLE R
EXISTING PARKING SUPPLY

TYPE	AMOUNT
On-Street	137
Off-Street	
Public	117
Private	412
TOTAL	666

Source: Allan G. Tilton, P.E. (1990)

The projected parking demand for a shopping center of 450,000 square feet of leasable floor area is 1,410 parking spaces. The parking demand based upon a shopping center comparison is significantly less than the projected aggregate demand for individual uses.

Public Transportation

The City of Calistoga uses a subsidized private taxi service as its primary means of public transit. The service requires 24-hour advance notice for usage, and does not operate on a fixed route schedule. The City also partially subsidizes the Tri-City Express Bus service, a bus like that operates on a regional level.

Bicycle and Pedestrian

Table S contains definitions of the bicycle classifications. The majority of the downtown core area of the City contains sidewalks. The majority of the area outside of the downtown core area does not have sidewalks.

Air Transportation

The following information was provided by the General Manager of the Calistoga Airport, Erik Striedieck, on November 28, 1989. The Calistoga Airport began operations approximately 40 years ago. The general public is restricted from landing at the airport without prior notification. The number of flights per day vary according to the time of year, weather, and other factors. There is an average of approximately 40 flights per day. On an annual basis approximately 20,000 users frequent the airport. Air traffic to the facility is restricted to single engine aircraft and gliders. Hours of operation are from 9:00 A.M. to sunset. There are no current plans for expansion of the airport facility.

IMPACTS

Under CEQA, increases in traffic that are substantial in relation to the load and capacity of the street system are significant impacts.

Vehicular Transportation

The proposed project will generate approximately 81,700 trips per day to the area circulation system. Additional trips will consist of approximately 17,820 residential, 60,227 commercial, and 3,635 industrial. Table T depicts existing and projected daily traffic volumes on selected street segments. Traffic volumes will increase and levels of service will worsen on all selected existing and proposed street segments with the exception of Washington Street east of Lincoln Avenue.

TABLE S
BICYCLE FACILITY DEFINITIONS

BIKEWAY CLASSIFICATION	DESCRIPTION
Class I	A completely separated right-of-way is designated for the exclusive use of bicycles. Vehicle and pedestrian cross flow are minimized.
Class II	A restricted right-of-way is designated for the exclusive or semi-exclusive use of bicycles. Through motor vehicle and pedestrian traffic is prohibited. Vehicle and pedestrian cross flows are permitted.
Class III	A right-of-way is designated by signs or pavement markings. The right-of-way is shared by motor vehicles, bicycles, and pedestrians.

Source: Allan G. Tilton, P.E. 1989

TABLE T
EXISTING AND PROJECTED DAILY TRAFFIC VOLUMES,
SELECTED STREET SEGMENTS

STREET		EXISTING		PROJECTED	
		VOLUME	LOS	VOLUME	LOS
1.	Eastern-Crossing	--	--	3,334	B
2.	New Oak Street	--	--	2,703	B
3.	New Sparrow/Swallow	--	--	4,610	C
4.	New Fair Way	--	--	3,974	C
5.	Foothill E/O Lincoln	8,735	D	11,717	D
6.	Foothill W/O Lincoln	7,630	D	10,919	D
7.	Foothill W/O PFR	5,290	C	7,953	D
8.	Grant Street	1,555	B	3,256	B
9.	Lincoln S/O Washington	10,100	D	12,364	D
10.	Washington E/O Lincoln	4,275	B	3,729	C
11.	Lincoln S/O Silverado	8,660	D	10,101	D
12.	Washington W/O Lincoln	3,430	B	4,637	C
13.	New Washington Exit	--	--	4,048	C
14.	Dunaweal	--	--	4,512	D

Source: Allan G. Tilton, P.E. (1990)

Increased traffic volumes will alter levels of service on selected street segments. Levels of service will increase on the following existing streets: Foothill west of PFR, Washington east of Lincoln, and Washington west of Lincoln. The adoption of the Circulation Plan will facilitate roadway expansions, improvements, and additions. The adoption of this Plan in conjunction with further recommended mitigation measures will reduce traffic and circulation impacts to a level of insignificance. Please refer to Exhibit 5, Project Description section, for an illustration of the proposed circulation plan.

Parking

The projected parking demand upon individual land uses and shopping center comparison exceeds the amount of available parking supply. The projected parking demand based upon individual land uses exceeds the parking supply by 3-to-1. The projected parking demand based upon the shopping center comparison exceeds the parking supply by a 2-to-1 margin.

Current City ordinances call for one parking space for each 100 square feet of leasable floor space for restaurants to one space for each 250 square feet of leasable office space. Under these ordinances, existing total parking demand in the downtown area is 2,250 parking spaces. With a current parking capacity of 666 spaces, the downtown area is suffering a significant parking shortfall. Buildout of the project would increase parking demand. This is considered a significant impact that can be partially mitigated but remain significant. Additional mitigation measures related to parking will be addressed in site-specific plans.

Public Transportation

The City uses a subsidized private taxi service for public transportation. No significant impacts are anticipated.

Bicycle and Pedestrian

Buildout of the proposed project will significantly impact bicycle and pedestrian facilities. Increased levels of traffic and construction of additional roadways will create the need for expanded bicycle and pedestrian facilities. Implementation of mitigation measures will reduce impacts to a level of insignificance.

Air Transportation

There are currently no plans for expansion of airport facilities. The airport is a limited private facility. No significant impacts are anticipated.

CUMULATIVE IMPACTS

The project, in conjunction with other past, present, and reasonably foreseeable/future projects will have an unavoidable significant cumulative impact on regional traffic and circulation.

MITIGATION MEASURES

60. The City shall develop their circulation system according to the Circulation Plan and diagrams.
61. Through the Capital Improvements Plan and related impact fees, the City shall ensure that adequate funds are provided to upgrade and maintain the existing circulation network.
62. The City, in conjunction with other municipalities, shall discuss possibilities of providing transportation services to citizens of Calistoga and the rest of the Napa Valley, including the possibility of utilizing designated cars on the Napa Valley Wine Train, a regional public bus system, or other forms of regional transportation.
63. Through the environmental review process, the City shall require proposed developments to include appropriate site planning techniques which minimize traffic impacts, and to provide necessary street improvements.
64. The City shall improve directional signing systems to help guide visitors to their destinations.
65. The City shall develop a benefit assessment district or a similar mechanism to assist in the funding of parking lot construction to meet local and tourist demands.
66. The City shall review parking facilities as part of the design review process for new or expanded development projects.
67. The City shall require repair and/or construction of sidewalks on all residential, collector and arterial streets.
68. The City shall prepare an urban design study to coordinate the development of pedestrian amenities and the character of the downtown area. The study will include:
 - Parking design and location
 - Street tree theme
 - Lighting

- Street furniture
- Building scale, bulk, and facade treatment
- Sign regulations
- Landscape standards

LEVEL OF SIGNIFICANCE

Impacts identified as insignificant include public transportation and air transportation.

Impacts mitigated to a level of insignificance include project-specific vehicular transportation and bicycle and pedestrian.

Impacts partially mitigated but remaining significant include parking demand. Impacts to parking will be further addressed in site-specific analysis.

The project, in conjunction with other past, present, and reasonably foreseeable regional projects will add incrementally to traffic and circulation congestion. This is considered an unavoidable significant impact.

AIR QUALITY

EXISTING CONDITIONS

The City of Calistoga is regionally located in Napa Valley in the northern portion of the Bay Area Air Quality Management District (BAAQMD). The Napa Valley is influenced by Bay Area weather patterns on a regional scale, and the valley meteorological conditions on a local scale. The following air quality information was provided in the March 1989 assessment completed for the Outdoor Resorts EIR. Additional sources of information include BAAQMD meteorology and air quality data.

Meteorology/Climate

The location of a Pacific high pressure cell controls the regional weather patterns. When in its summer position just off the coast of California, hot, dry winds circulate in the valley due to the isolation of the area from weak low pressure cells. With the heating of the valley during the long summer days, high temperatures often exceed 100 F. Since marine air and cooling coastal fogs, which regulate the lower Bay Area climate, cannot penetrate the nearby coastal range, the intense heating of the valley floor produces a thermal trough or low pressure area. This condition pulls cooler air from the coastal high pressure area over the range and up the valley from the Bay.

Another local weather cycle has a more detrimental effect on air quality. During the winter, the Pacific high typically moves Southwest of its normal position allowing low pressure winter storms into the Bay Area. Typical temperatures range between 30 and 70 F, but can drop as low as 22 F. During the winter and spring, the majority of the average 38 to 40 inches of rainfall per year is dropped in the valley. As in the nearby Central Valley, radiation fogs develop when the warm moist air masses cool through contact with the earth's cold surface at night. In the spring and early summer, these fogs usually dissipate by midday but often temperature inversions develop in the Valley during the night. These inversions trap Bay Area pollutants at low levels. Without the cleaning effect of winter and early spring rains, impaired air quality in the valley can result. Winter air flow patterns also bring San Pablo Bay and Santa Rosa pollution over the hills with coastal winds that blow north up the coast. Since inversions can occur, efforts to regulate and prohibit polluting uses are necessary.

Monitored Air Quality

Air quality varies widely over the Bay Area due to the spatial distribution of pollution sources and the different microclimates existing in the area. Inland areas and those containing large central business districts have historically reflected occasional high levels of photochemical oxidants or "smog" (including ozone), carbon monoxide (CO), and total

suspended particulates (TSP). Oxidant levels have declined in the Bay Area over the past ten years. From 1985 to 1986, the number of exceedances of the federal 0.12 ppm one-hour standard dropped from nine to five days. Santa Clara County has experienced most of these exceedances due to Bay Area summer meteorological conditions. Closer to Calistoga, the Napa monitoring station has not recorded a violation since 1978 when the 0.12 ppm recorded was a violation. (At this time the federal standard was a more stringent 0.08 ppm.)

The nearest air monitoring station operated by the BAAQMD is in Santa Rosa. The data collected at this station is considered to be representative of the air quality experienced in the vicinity of the project area. Air quality data during 1988 for the Santa Rosa and Napa Station is provided in Table U.

Ozone is the air pollutant of primary concern in the project area. Ozone is a secondary pollutant; it is not directly emitted. Ozone is the result of the chemical reactions of other pollutants, most importantly hydrocarbons and nitrogen dioxide, in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the Study Area.

High CO values develop around slow moving traffic on heavily congested roadways during cold, calm winter nights. In the Bay Area, these conditions typically exist in downtown central business districts such as San Jose. CO values fluctuate yearly due to varying meteorological conditions. In 1983 the Bay Area recorded four exceedances of the 8-hour standard of 9.3 ppm, twenty in 1985, and eight in 1986. The nearby Napa and Santa Rosa Monitoring stations, however, have not recorded any data greater than the standards.

Santa Rosa Station

The Santa Rosa station has never recorded an exceedance. The data collected at these nearby recording stations is presented in Table U. For ozone and nitrogen dioxide (NO_x), "max" is the highest hourly average value in parts per million. For carbon monoxide (CO) max is highest 8-hour average value in parts per million. For sulfur dioxide (SO_x) max is the highest 24-hour average value expressed in parts per billion.

Particulate concentrations monitored at the stations should be representative of levels currently experienced at the project site. Particulates levels in the area are due to natural sources, grading operations, and motor vehicles.

Napa Station

The Napa Station has never recorded an exceedance. The data collected at these nearby recording stations is presented in Table U. This table shows that air quality measurements are slightly higher in Napa than in Santa Rosa.

TABLE U
 AMBIENT AIR QUALITY STANDARDS

POLLUTANT	AVERAGING TIME	CALIFORNIA STANDARD	NATIONAL STANDARD	YEAR	MAXIMUM LEVEL (per year standard exceeded)		DAYS (per year standard exceeded)	
					Napa	Santa Rosa	Napa	Santa Rosa
Ozone	1 Hour	pphm	12 pphm	1987	11	10	0	0
CO (Carbon Monoxide)	1 Hour	20 ppm	35 ppm	1987	5.6	4.3	0	0
NOx (Nitrogen Dioxide)	1 Hour	24 pphm	5 pphm	1987	9	9	0	0
SOx	24 Hours	50 ppb	140 ppb	1987	7	2	0	0

Source: STA Planning, Inc.

Notes: pphm = parts per hundred million
 ppb = parts per billion
 ppm = parts per million

Particulate concentrations monitored at the stations should be representative of levels currently experienced at the project site. Particulates levels in the area are due to natural sources, grading operations, and motor vehicles.

Federal Standards

In 1987, the federal standards for total suspended particulates (TSP) were replaced by standards governing particulates smaller than 10 microns (PM-10). These particles are detrimental to health since they can penetrate deep into the lungs. Within the Bay Area only a few sites are currently recording PM-10 data. Of these, only San Jose has recorded exceedances of the 1540um/m³ standard because of downtown construction. Historically, the federal TSP standard has never been exceeded at Santa Rosa or Napa.

Vehicular Emissions

Air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants through the air basin. Estimates for the Bay Area Air Quality Management District have been made for existing emissions. The data from the 1989-1990 Air Quality Handbook indicate that mobile sources are the major source of regional emissions. Motor vehicles (i.e., on-road mobile sources) account for approximately 78 percent of carbon monoxide, over 50 percent of nitrogen oxide emissions, and no excess of sulfur oxides was reported at either state or federal standards at District stations since 1976.

Emission factors were obtained from the 1989-1990 BAAQMD's Air Quality Handbook. Existing emissions are presented in Table V. Existing emissions are based on existing traffic estimates prepared by Allan G. Tilton for the General Plan Update. Calculations are presented in Appendix E.

Regional Air Quality Plans

Three agencies share the responsibility of achieving the National Ambient Air Quality Standards (NAAQS) within the Bay Area: the Bay Area Air Quality Management District (BAAQMD), the Association of Bay Area Governments (ABAG), and the Metropolitan Transportation Commission (MTC). These agencies developed a plan to meet the NAAQS by the December 31, 1987 deadline imposed by the Environmental Protection Agency. This plan contained measures to reduce emissions of industrial sources, improve and encourage participation in the State Inspection and Maintenance program, and increase the use of transportation control measures to reduce motor vehicle travel. The Bay Area did not achieve the NAAQS by the 1987 deadline; EPA must now choose a course of action leading towards these goals and meeting all legal requirements. The BAAQMD and MTC are currently preparing an air quality management plan.

TABLE V
VEHICULAR EMISSIONS

POLLUTANT	EXISTING EMISSIONS (LBS/DAY)			PROPOSED PROJECT		
	Residential	Industrial	Commercial	Residential	Industrial	Commercial
Carbon Monoxide	2410.7	238.6	5667.4	2071.3	841.0	2596.1
Nitrogen Oxides	394.9	44.1	1129.9	339.3	115.6	517.6
Total Organic Gases	236.7	23.8	587.0	303.3	83.3	268.9

Source: STA Planning

IMPACTS

According to CEQA, a project would have a significant effect if criteria air pollutant emission levels would cause violations of any air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations.

Vehicular Emissions

In order to determine the regional impacts of the proposed project, an air quality analysis was performed using the Urbemis 2 Computer model distributed by the California Air Resources Board (CARB). Estimates of the vehicular emissions for the existing and future projects generated by the proposed project were made. The results of the analysis are shown in Table V. Modeling assumptions and calculations are presented in Appendix E.

The existing emissions show the highest levels of pollutant will be generated by commercial uses. Residential uses generate approximately half of what the commercial pollutants emit. Table V shows industrial pollutants emitting the least amount of pollutants. Comparing future development to the existing commercial and residential pollutants indicated they are significantly less than those of the existing. However, Future Industrial pollutant are found to have a greater amount of pollutants than the existing development.

Project-Specific

Air quality impacts are divided into short-term and long-term. Short-term impacts are usually the result of construction or grading operations. Long-term impacts are associated with General Plan build out.

Short-Term Impact

Temporary impacts will result from project construction activities. These impacts can be mitigated to a level of insignificance through the implementation of the mitigation measures. Air pollutants will be emitted by construction equipment and dust will be generated during grading and site preparation. Construction activities for large development projects are estimated by the U.S. Environmental Protection Agency to add 1.2 tons of fugitive dust per acre of soil disturbed per month of activity.

Long-Term Impacts

The main source of emissions generated by the project will be from motor vehicles. Other emissions will be generated by the combustion of natural gas and electricity for space heating. Mitigation provided will reduce project-specific long-term impacts to a level of insignificance.

CUMULATIVE IMPACTS

Implementation of the proposed General Plan in conjunction with the implementation of other General Plans within the Bay Area Air Quality Management District will result in a cumulative degradation of the air quality. This is considered a partially mitigable unavoidable significant cumulative impact.

MITIGATION MEASURES

69. The City shall implement improvements recommended in the MEA and in the Circulation Element of the General Plan. Special attention shall be given to improvements related to pedestrian and bicycle usage.
70. The City shall review all development proposals for short-term and long-term impacts to air quality.
71. The City shall support the Bay Area Air Quality Management District, and implement reasonable and feasible new regulations related to the improvements of air quality.

LEVEL OF SIGNIFICANCE

Implementation of the mitigation measures will reduce the project-specific short-term construction and long-term vehicular and combustion of natural gas and electricity impacts to a level of insignificance.

The project in conjunction with other past, present, and reasonably foreseeable future projects, will incrementally contribute to long-term impacts on air quality. The project's contribution to this cumulative impact is considered significant.

NOISE

EXISTING CONDITIONS

Methodology

Noise is commonly described as unwanted sound. Several rating scales have been developed to measure community noise. The scales account for the following:

- The parameters of noise that have been shown to contribute to the effects of noise on man,
- The variety of noises found in the environment,
- The variations in noise levels that occur as a person moves through the environment, and
- The variations associated with the time of day.

Sound levels are conventionally measured in units of decibels, abbreviated dB. When referring to dBA sound level units, the A indicates that the sound signal is electronically processed to mimic the response of the human ear before the level in decibels is determined.

Changes in sound level are roughly correlated with changes in perceived loudness. A 3 dBA increase in sound level is barely noticeable to the human ear under normal circumstances. An increase by 10 dBA is generally perceived as a doubling of loudness.

A measure of equivalent sound level is Leq. Leq is a type of average sound level. It is the level, in dBA units, of a fictitious steady state sound which would deliver the same acoustic energy during a given period of time as a time-varying, measured sound delivers during the same period.

A day/night sound level is represented as Ldn. An Ldn is the average (Leq) level, in dBA units, during a one year period which results when 10 dBA are added to sound levels measured during night time hours (10 p.m. to 7 a.m.). Ldn is a type of weighted average sound level which emphasizes noise levels measured during the more sensitive night time hours. This description is used as a measure of community noise exposure in many federal, state and local noise regulations and standards.

Noise Sources

Potential noise sources identified in the September 1989 study by T.A. Barneby of Sound Solutions include roadways, the Calistoga Soaring Center, Sprint Car Races at the Napa County Fairgrounds, and Wind Machines associated with agricultural production. Exhibit 15 depicts the Community Noise Environment and plots each of the identified noise sources as well as sensitive receptors. Table W summarizes the typical noise levels in the City of Calistoga. Each noise source is described below.

Roadway Noise

As Exhibit 15 indicates, the noise environment is dominated by motor vehicle traffic. Table X gives the locations of the Ldn noise contours near those roadways which may be important sources of noise. The contours are based upon measurements of existing noise levels. They are nominal since they do not take into account any noise attenuating structures such as fences and buildings, that may exist in some locations.

From the positions of the roadway contours, percentages of the population of Calistoga exposed to various Ldn values have been estimated. Table Y presents the resulting inventories. As Table Y indicates, approximately 97% of the existing population is exposed to noise levels below the state limit for residential areas. In general, the normally acceptable limit is 60 dBA.

Calistoga Soaring Center

The Calistoga Soaring Center is located near the intersection of Lincoln Way and Stevenson Avenue. Ldn contours due to glider tow planes at the Calistoga Soaring Center are given in Exhibit 16. These contours were developed by CALTRANS in 1983, and are expected to approximate existing conditions. The 55 Ldn contour extends the furthest. A level of 55 dBA is considered Quiet to Moderately Loud. This is the typical noise levels found in Calistoga.

Sprint Car Races at the Napa County Fairgrounds

Sprint Car Races are isolated events, taking place on approximately five evenings each year. During the races, noise levels in the neighborhoods surrounding the fairgrounds are substantially higher than normal.

Because of their limited time and durations, Ldn (an annual average) is not an appropriate description of the noise due to the races. The Leq during the event is more useful. Leq contours under typical race conditions are given in Exhibit 17. As indicated, the 60 Leq contour extends over much of the City.



Source: Sound Solutions

COMMUNITY NOISE ENVIRONMENT

GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT
City of Calistoga

STA inc.
no scale



Exhibit 15

TABLE W
TYPICAL NOISE LEVELS FOUND IN CALISTOGA

LOUDNESS DESCRIPTION	NOISE LEVEL IN dBA	REPRESENTATIVE NOISE SOURCE IN THE CITY OF CALISTOGA
THRESHOLD OF PAIN	130	
	120	
	110	Auto Horn at Three Feet Pop Music in Bar or Nightclub
VERY LOUD	100	
	90	Sprint Car at 100 Feet Wind Machine at 200 Feet
MODERATELY LOUD	80	Loud Motorcycle Cruising at 50 Feet
	70	Diesel Truck Idling at 50 Feet Tow Plane in Neighborhood Near Airfield
	60	Conversational Voice Level at Four Feet Automobile Idling at 50 Feet
	50	
QUIET	40	Typical Ldn in Quiet Neighborhood
	30	Minimum Nighttime Level in Quiet Area Soft Whisper at Ten Feet
JUST AUDIBLE UNDER NORMAL CONDITIONS	20	
	10	Softly Rustling Leaves at Ten Feet
THRESHOLD OF AUDIBILITY FOR YOUNG, HEALTHY EARS UNDER LAB CONDITIONS	0	

Source: Sound Solutions

TABLE X

Ldn CONTOUR DISTANCES FROM ROADWAY CENTERLINE (FEET)

ROADWAY SEGMENT DESCRIPTION	EXISTING			FUTURE		
	55 dBA	60dBA	65dBA	55dBA	60dBA	75dBA
LINCOLN AVENUE						
Foothill-Cedar	134	62	29	137	64	30
Cedar-Washington	143	66	31	141	65	31
Washington-Silverado	129	60	28	134	62	29
Silverado North	323	150	70	62	198	92
FOOTHILL BOULEVARD						
Dunaweal-Lincoln	285	132	61	347	161	75
Lincoln-Berry	261	121	56	331	154	71
Berry-Pet. Forest	261	121	56	268	124	58
Pet. Forest-Tubbs	204	95	44	163	76	35
SILVERADO TRAIL						
Dunaweal-Lincoln	209	97	45	283	131	61
WASHINGTON STREET						
Lincoln East	80	37	17	73	34	--
Lincoln-Berry	69	32	--	84	39	--
Berry-Lake	50	23	--	93	44	20
LAKE STREET						
Fair Way-Grant	48	22	--	86	40	19
BERRY STREET						
Foothill-Ceder	45	21	10	99	46	21
PETRIFIED FOREST						
Foothill South	181	84	39	222	103	48

Source: Sound Solutions

Note: Noise exposures are not expected to be significant near roadway segments not listed.

"--" Indicates that the indicated contours do not exist on the adjacent residential parcels.

TABLE Y
NOISE EXPOSURE INVENTORY

SCENARIO	Ldn RANGE (dBA)			
	<u>Below 55</u>	<u>55-60</u>	<u>60-65</u>	<u>65-70</u>
Approximate percentage of the existing population with residences exposed to noise levels within the give range.	90.6%	5.9%	3.0%	5%
Approximate percentage of the future buildout population with residences exposed to noise levels within the given range.	86.7%	10.0%	3.0%	3%

Source: Sound Solutions



Source: Sound Solutions

CALISTOGA SOARING CENTER **Ldn CONTOURS**

GENERAL PLAN UPDATE
 ENVIRONMENTAL IMPACT REPORT
 City of Calistoga

STA inc.
 no scale

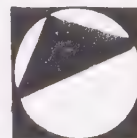
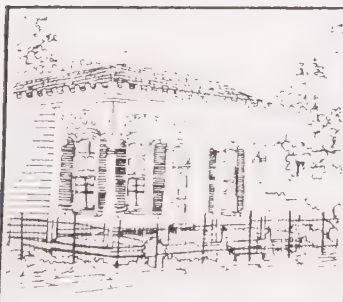


Exhibit 16



Source: Sound Solutions



SPRINT CAR RACE Leq CONTOURS LOCAL

GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT
City of Calistoga

STA inc.
no scale



Exhibit 17

Wind Machines

Several anti-frost wind machines exist in the agricultural areas zoned as Transitional Districts of the City. The intermittent and seasonal nature of their operation implies that the associated noise is best described by the Leq value during operation. The locations of Leq contours around a typical wind machine are given in Table Z.

Other Noise Sources

In the recent past, noise generated by the Calistoga Water Bottling plant has generated complaints from nearby residents. An acoustical analysis has led to resolution of the problem. Concern has also been expressed about noise produced by heavy trucks servicing the bottling plant. This potential noise source is not considered significant. The number of trips involved is small (approximately 10 per day). No truck trips occur during nighttime hours or on weekends. Under these conditions, the trucks contribute negligibly to the average noise levels due to motor vehicle traffic in general.

Complaints were received about excessive noise produced by the Crystal Geyser bottling plant when an exterior air compressor was added to existing refrigeration in September. A noise attenuating enclosure has resolved this issue.

IMPACTS

CEQA identifies the substantial increase of ambient noise levels in areas adjacent to the project as being a significant environmental impact. The potential for significant impact also exists where the community noise standards are violated.

According to Table Y future buildout population noise exposure inventory a large percentage of the population will continue to remain below the 55 Ldn Range (dBA) level. This level is found to be 86.7%, a 3.9% decrease from the existing population. The 55-60 Ldn contour level will represent a small percentage increase of 4.1% to 10.0%. The 60-65 Ldn level will represent a level of 3.0% for both the existing and future population. The 65-70 range represents the only decrease in the Ldn Range, of 0.2% to .3%.

Roadway Noise

Results of future project developments show significant roadway impacts on Table Z. The difference between the existing and future Ldn Contour distances from roadway centerline for the 55, 60 and 65 dBA have been calculated. The results show a significant impacts to the following roadways: Silverado Trail, Washington Street, Lake Street, and Berry Street. This is considered a significant impact. Mitigation measures will partially mitigate these impacts, but will still remain significant.

TABLE Z

Leq CONTOURS NEAR A TYPICAL WIND MACHINE

Contour Leq (dBA)	Distance of Contour From Wind Machine (Feet)
90	126
85	224
80	400
75	710
70	1,125
65	1,782
60	2,518
55	3,170

Source: Sound Solutions

For instance, the 55 dBA is considered to be a quiet noise level, Lincoln Avenue, (Silverado North) extends a level of significant distance of 104 feet out of the land. Furthermore, on Silverado Trail (Dunawear-Lincoln), Washington Street (Lincoln, East, Lincoln, Berry, and Berry-Lake extends a level of 43-75 feet out. The 60-65 dBA level is considered to be moderately loud to quiet level of loudness. Table X again indicates an increase in contour distance ranging from 1-48 feet out. The roadway which appear to be most impacted include, Lincoln Avenue (Silverado North, Silverado Trail, and Washington Street). It is difficult to determine specific future roadway contours due to the fact that no specific projects have been proposed making the roadway, and contour areas unknown. Therefore, future projects based under the General Plan will require more site proposed specific analysis and contour studies.

Differences in dBA levels have been calculated on Table AA. Little change in dBA levels are found to be Lincoln Avenue (Foothill-Cedar, Cedar-Washington, Washington to Silverado, and Foothill Boulevard. Greater changes in dBA levels are found on Lincoln Avenue (Silverado North), Silverado Trail, Washington Street, Lake Street, and Berry Street.

Calistoga Soaring Center

Ldn contours for the Soaring Center are shown on Exhibit 16. The contours shown on Exhibit 16 were developed by CALTRANS in 1983, and expected to approximate future conditions. Implementation of the General Plan Update is expected to increase the number of people exposed to noise from the Soaring Center. These noise levels are within typical noise standards and are not expected to result in significant impacts.

Sprint Car Races at the Napa County Fairgrounds

Implementation of the proposed General Plan will result in a greater number of people being exposed to the 60 Leq noise contour that extends over much of the City. There is no expected increase in the existing sprint car activity at the Napa County Fairgrounds. Noise impacts as a result of the sprint car races are expected to be partially mitigable unavoidable significant impacts.

Wind Machine

Implementation of the General Plan is expected to increase the number of people exposed to Wind Machine noise. This increase will be offset by the reduction of agricultural operations in the City of Calistoga. The three large agricultural parcels within the City are being redesignated for residential uses. This is not considered a significant impact.

TABLE AA

DIFFERENCE OF EXISTING AND FUTURE Ldn CONTOUR

ROADWAY SEGMENT DESCRIPTION	55 dBA	60 dBA	65 dBA	SIGNIFICANT		
				55 dBA	60 dBA	65 dBA
LINCOLN AVENUE						
Foothill-Cedar	3	2	1	no	no	no
Cedar-Washington	-2	-1	0	no	no	no
Washington-Silverado	5	2	1	no	no	no
Silverado North	104	48	22	yes	yes	yes
FOOTHILL BOULEVARD						
Dunaweal-Lincoln	62	29	14	yes	yes	yes
Lincoln-Berry	70	33	15	yes	yes	yes
Berry-Pet. Forest	7	3	2	no	no	no
Pet. Forest-Tubbs	-41	-19	-9	no	no	no
SILVERADO TRAIL						
Dunaweal-Lincoln	74	34	16	yes	yes	yes
WASHINGTON STREET						
Lincoln East	-7	-3	--	no	no	--
Lincoln-Berry	15	7	--	yes	no	--
Berry-Lake	43	21	20	yes	yes	yes
LAKE STREET						
Fair Way-Grant	38	18	19	yes	yes	yes
BERRY STREET						
Foothill-Ceder	54	25	11	yes	yes	yes
PETRIFIED FOREST						
Foothill South	41	19	9	yes	yes	no

Source: Sound Solutions

Note: Noise exposures are not expected to be significant near roadway segments not listed.

"--" Indicates that the indicated contours do not exist on the adjacent residential parcels.

CUMULATIVE IMPACTS

The proposed project in conjunction with other past, present, and reasonably foreseeable future projects will contribute incrementally to noise in the City of Calistoga. The cumulative increase is not considered to be an unavoidable impact of the project upon implementation of the programmatic mitigation provided below.

MITIGATION MEASURES

72. The City shall develop a comprehensive noise ordinance incorporating the provisions contained in the Technical Supplement to the Noise Element of the City of Calistoga General Plan prepared by Sound Solutions on October 23, 1989.
73. The provisions of the Noise Element and accompanying Technical Supplement shall be incorporated into the City Zoning Code.
74. The City Planning Department shall evaluate all proposed projects for noise exposure in accordance with the flow chart in Figure 4 in the Technical Supplement to the Noise Element of the City of Calistoga General Plan prepared by Sound Solutions on October 23, 1989.
75. The City Planning Department shall evaluate all proposed projects involving noise sources for noise production in accordance with the flow chart in Figure 5 in the Technical Supplement to the Noise Element of the City of Calistoga General Plan prepared by Sound Solutions on October 23, 1989.
76. The City Building Department shall develop procedures to check compliance of proposed buildings with the California State Noise Insulation Standards and noise-related provisions of the Uniform Building Code. Procedures shall also be implemented to check for consistency between building plans and any specifications for noise mitigation measures given in required noise studies.
77. The City Planning Department shall require post-project monitoring of noise levels when appropriate to determine whether the completed project is in compliance with Noise Element standards.
78. The City shall review and comment on documents of a regional nature that pertain to noise.
79. The City shall implement all recommended improvements related to bicycle and pedestrian paths as stated in the Circulation Element.

LEVEL OF SIGNIFICANCE

The Calistoga Soaring Center and the Wind Machines are expected to have insignificant noise impact upon implementation of the General Plan.

Implementation of the mitigation measures will partially mitigate roadway noise impacts along Silverado Trail, Washington Street, Lake Street, and Berry Street and noise impacts from the sprint car races. These impacts remain significant after mitigation.

Upon the implementation of programmatic mitigation, incremental cumulative impacts are not expected to be significant.

BIOLOGICAL RESOURCES

EXISTING CONDITIONS

Vegetation

There are four major vegetation communities found within Napa County. Marshes are found along the shore of San Francisco and San Pablo Bays, and inland where saline or freshwater saturated soil are prevalent. Grasslands are found on the valley floors and hillsides, up to 4,000 feet, and are located in the southern portion of the county. The foothill woodland community is made up of oak and digger-pine trees and is located in numerous places throughout the county, including the mountainous eastern and western boundaries of the County. The last vegetation community found in Napa County consists of chaparral vegetation, which can be found throughout the County. Chaparral vegetation grows in areas where the soils are rocky and where average rainfall ranges from 14 to 25 inches per year. The mountain slopes on both sides of the valley are dominated by coniferous trees with some chaparral in the drier areas. (Cal Poly San Luis Obispo, Information Profile Fall 1987)

Most of the original native plants to Calistoga and the Napa Valley have been eliminated over time due to increased agricultural uses. Grassland and oakland (deciduous woodland) were the prevalent vegetation in the area, but have been converted into vineyards, orchards, and pastures. Of the woodland that remains, Live Oak and Valley Oak are the two most common species in the Calistoga area. The grasses that are present in Calistoga and the surrounding Napa Valley are primarily of European origin. The European strains eventually replaced the native Wild Oat and Italian Ryegrass after their introduction to the area by white settlers. The riparian communities and woodlands along the creekways in Calistoga, and along the Napa River, are essentially the only principal natural habitat remaining. (Cal Poly San Luis Obispo, Information Profile Fall 1987)

Following is a list of some of the more common plant species in the Napa Valley and Calistoga area (common names): Hedge Mustard, Mustard, Thistle, Miniature Lupine, Poison Hemlock, Yarrow, Sage, Pacific Willow, Indian Paint Brush, Bush Morning-glory, Blackberry, California Mugwort, Coyote Brush, Douglas Fir, Ponderosa Pine, Mint, Maidenhair Fern, Cotton Easter, Blue Brush, Slender-Tubed Iris, English Elm, Eucalyptus, Nightshade Nettle, California Poppy, Poison Oak, Elegant Clarkia, Foxtail, Sweet Fennel, Bush Monkey Flower, Red Alder, Moth Mullen, California Live Oak, California Buckeye, Common Scouring Rush, Fremont Cottonwood, Marsh Skullcap, California Sycamore, Wild Oat, Ryegrass Coast Redwood, Madrone, Digger Pine, Bamboo, Cattails, and Duckweed. (Cal Poly San Luis Obispo, Information Profile Fall 1987)

At one time Calistoga and the Napa Valley were abundant in woodlands. Due to the extensive harvesting of timber in the past, both Calistoga and the Napa Valley suffer from a lack of timber. There are several areas in the Napa Valley which are completely devoid of timber, including portions of Calistoga. In the areas where there are woodlands (Douglas fir), these areas are poorly stocked. No timber harvest occurs within the Calistoga study area. Where Napa Valley was once an active timber operator, the County now produces less than one percent of California's timber. In order to combat the loss of woodlands in the area and to prevent further damage of poorly stocked woodlands, Calistoga has adopted a tree preservation ordinance (Cal Poly San Luis Obispo, Information Profile 1987).

Mt. Washington is thickly covered by woodland species typical of the hills surrounding the upper Napa Valley, including tree/shrub species. Table BB depicts native plants observed at Mt. Washington on March 10, 1987 by Joe Callizo of the California Native Plant Society. The density of the vegetation forms a nearly closed canopy in some parts of the hill, and there is not much evidence of replacement of older trees, though the mature trees appear healthy. Plant species observed in the field/ pasture at the base of Mt. Washington include: brass buttons, water cress, meadow foam, callitriche, vernal buttercup, and valley oak.

Mt. Lincoln is covered by woodland species typical of the hills surrounding the upper Napa Valley, including a mix of live oaks, laurel madrone, and Douglas fir.

Wildlife

Following is a list of some of the more common bird and mammal species found in the Napa Valley and Calistoga area (Cal Poly San Luis Obispo, Informational Profile, 1987):

Birds: Robin, Red-Tailed Hawk, California Quail, Morning Dove, Allen's Hummingbird, Barn Swallow, Cliff Swallow, Scrub Jay, Chickadee, Wren, Newick's Wren, Mocking Bird, Swainson's Thrush, Hutton's Vireo, Wilson's Warbler, Goldfinch, Brown Towhee, White-Crowned Sparrow, Red Winged Blackbird, Sparrow Hawk, Chicken Hawk, Great Horned Owl, Red-Shafted Flicker, California Thrasher, Blue-Gray Gnatcatcher, Ruby-Crowned Kinglet, Shrike, Orange-Crowned Warbler, Oregon Junco, Golden-Crowned Sparrow, Fox Sparrow, Western Grey, Rock Dove, House Sparrow, Willet, and Killdeer.

Other Mammals: Vagrant Shrew, Trowbridge Shrew, Broad-handed Mole, Coast Mole, Pocket Gopher, Great Basin Pocket Mouse, Santa Cruz Kangaroo Rat, Brush Mouse, California mouse, Pinyon Mouse, Deer Mouse, Dusky-footed Wood Rat, California Meadow Mouse, Long-Tailed Weasel, Raccoon, Striped Skunk, Bobcat, Opossum, Coyote, Black-Tailed Deer, Black-Tailed Hare, Eastern Cottontail Rabbit, and Muskrat.

TABLE BB

MT. WASHINGTON VEGETATION LIST

COMMON NAME	SPECIES
Valley Oak	<u>Quercus lobata</u>
Coast Live Oak	<u>Quercus agrifolia</u>
Madrone	<u>Arbutus menzeisii</u>
Kellog Oak	<u>Quercus kelloggi</u>
Digger Pine	<u>Pinus sabiniana</u>
Ponderosa Pine	<u>Pinus ponderosa</u>
Douglas Fir	<u>Pseudotsuga menzeisii</u>
Oak-loving Mistletoe	<u>Phoradendron villosum</u>
Woodland Manzanita	<u>Arctostaphylos manzanitae</u>
Blue Elderberry	<u>Sambucus cerulea</u>
Poison Oak	<u>Toxicodendron diversilobum</u>
Bush Monkey Flower	<u>Mimulus aurantiacus</u>
Coyote Brush	<u>Bacharis pilularis consanguinea</u>
Toyon	<u>Heteromeles arbutifolia</u>
Woodland Honeysuckle	<u>Lonicera hispidula vacilans</u>
Indian Soap	<u>Chorogallum pomeridianum</u>
Hound's Tongue	<u>Cynoglossum grande</u>
Hairless Mule Ears	<u>Wyethia glabra</u>
Gamble Weed	<u>Sanicula crassicaulis</u>
Indian Warrior	<u>Pedicularis densiflora</u>
Shooting Star	<u>Dodecatheon hendersonii</u>
Wood Rush	<u>Luzula comosa</u>
California Buttercup	<u>Ranunculus californicus</u>
Common Cleavers	<u>Galium aparine</u>
Hillside Pea	<u>Lathyrus sp.</u>
Collinsia	<u>Collinsia sp</u>
Phacelia	<u>Phacelia sp.</u>

Source: California Native Plant Society, March 10, 1987

The optimum concentration of wildlife occurs in areas where there is a high degree of diversity in the types of habitat available to the wildlife such as the riparian corridors and the hillside woodlands. A suitable habitat includes an adequate ground cover to increase the wildlife population. In a given area, the best method is to increase the quantity and quality of suitable habitat (1977 Calistoga General Plan).

Threatened and Endangered Species

The peregrine falcon (Falco peregrinus anatum), is listed as "endangered" by both federal and state agencies. The peregrine falcon hunts down out of canyons in the Napa Valley to waterways in the Calistoga area as well as in other portions of the Napa Valley (phone interview, Allan Buckmann, Department of Fish and Game, November 30, 1989). The prairie falcon (Falco Mexicanus), listed as "endangered" by the state, species are occasionally spotted in the vicinity between Napa River and Garnett Creek (Arroyo Acres Subdivision EIR, June 1985). The California Clapper Rail and Peregrine Falcon are rare and endangered species in the Napa Valley. These birds are found in vegetation bordering tidal marsh areas with good cover, or in rock outcroppings near water (Cal Poly San Luis Obispo, Informational Profile Fall 1987).

The California Native Plant Society (CNPS), Napa County Land Trust, and the Department of Fish and Game have indicated that two rare plants are known to be present in the MEA study area. These plants are the Calistoga popcorn flower (Plagiobothrys strictus), and the Napa bluegrass (Poa napensis). Plants are generally rare for one of two reasons: 1) they are naturally limited to a particular locality or habitat; or 2) their locality or habitat is becoming limited due to man's activities (PG & E 1985).

Napa bluegrass is listed as endangered, and the Calistoga popcorn flower is a candidate species for listing as endangered by the California Department of Fish and Game. Both species have been placed on the 1B list by the California Native Plant Society. List 1B consists of plants that are rare or endangered in California or elsewhere. Both species are listed as Category 2 by the U.S. Fish and Wildlife Service. Category 2 indicates species under review by the United States Fish and Wildlife Service for which their current information indicates probable appropriateness of listing as endangered or threatened, but for which sufficient information is not presently available.

Both species of concern are associated with hot springs and wetlands, including the geyser area, and grow primarily in clay loam soil. The two species are often sighted growing in together in the same area. According to the Department of Fish and Game's Natural Diversity Database, they were last observed in 1986 in the Calistoga area. P. napensis was observed in the Myrtledale hot springs area on both sides of Grant Avenue two miles north of Calistoga and P. strictus was sighted at Calistoga geysers northwest of Calistoga.

The CNPS annually conducts field surveys for rare plant species. Napa bluegrass and the Calistoga popcorn flower have been located within the City limits near the Calistoga Soaring Center landing strip and within the MEA study area near Tubbs Lane and Grant Avenue (phone interview, Joe Callizo, CNPS, October 6, 1989). Please refer to Exhibit 18 which shows the locations of the species.

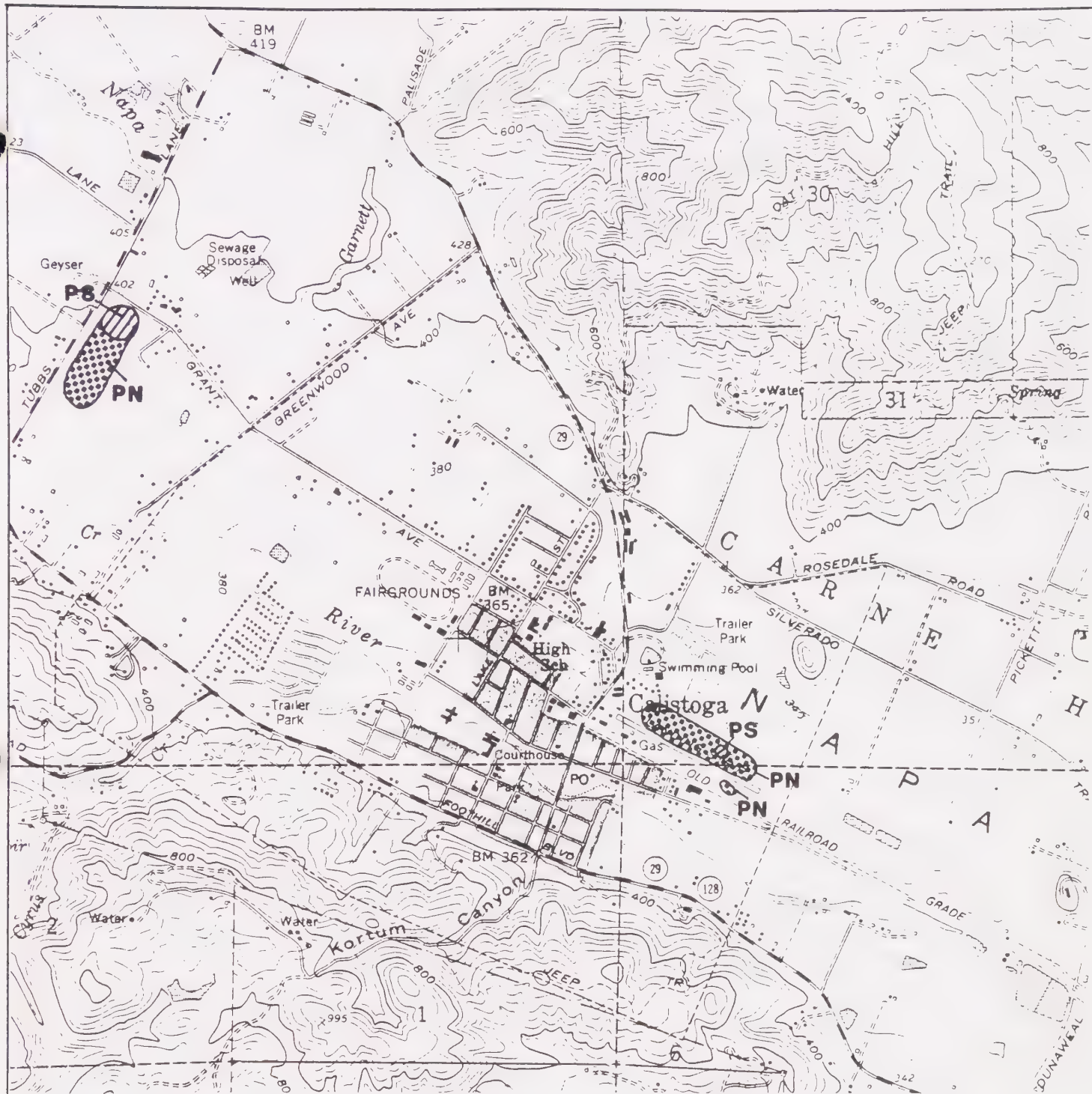
Other species from the CNPS's watch list are known to grow in the Calistoga area. These include Brewer's milkvetch (Astragalus breweri), Calistoga buckrush (Ceanothus divergens), and the Chaparral lily (Lilium rubescens). Brewer's Milkvetch has been found near Tubbs Lane and Grant Avenue within the MEA study area. The other two species have been located outside of the MEA study area. The CNPS does not advocate protection of these plants, but continually surveys for the plants to assess their populations.

Over several years, PG & E conducted an analysis of rare plants in the Geysers-Calistoga Known Geothermal Resource Area (KGRA) which is located in portions of Sonoma, Lake, Napa and Mendocino Counties. The purpose of the study was to determine the impact of geothermal development on specific rare plants. The study area included the region in and within five miles of the Geysers KGRA. The City of Calistoga was included within the study area. The final report was issued on September 3, 1985.

The PG & E report surveyed twenty-one rare plants including the Napa bluegrass and Calistoga allocarya (popcorn flower). In the PG & E study area, the various rare plants occur most frequently in three vegetation habitat types: vernal pools, serpentine chaparral, and serpentine barrens. Vernal pools are shallow depressions that fill with water in winter and slowly dry in the spring. Serpentine chaparral is a sparse assemblage of shrubs on serpentine soils, and serpentine barrens are nearly devoid of vegetation and occur on serpentine bedrock. These three habitats are limited in distribution in the study area.

Development itself results in habitat loss if construction occurs on the species site. Geothermal development has operational effects that impact vegetation. The impacts result from: 1) chemical compounds emitted with the steam, primarily through the cooling tower; and 2) changes in atmospheric humidity due to cooling tower drift. The product Boron, that is in the steam, is considered the main source of damage.

The PG & E study noted that, within their study area, eight rare plants occur that are found nowhere else in California. They are: The Geysers panicum, Lake County dwarf flax, few-flowered navarretia, many-flowered navarretia, Lake County stonecrop, Calistoga allocarya (popcorn flower), Napa bluegrass, and Socrates Mine jewelflower. Of these eight restricted plants, only few-flowered navarretia and many-flowered navarretia have a portion of their population protected at The Nature Conservancy's Boggs Lake Preserve. The remaining six rare plants have the greatest potential of extirpation.



PN *Poa Napensis* (Napa Bluegrass)



PS *Plagiobothrys Strictus* (Calistoga Allocraya)

Source: California Native Plant Society



RARE PLANT LOCATIONS

GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT
City of Calistoga

STA inc.



Exhibit 18

IMPACTS

Under CEQA and for purposes of this EIR, significant effects on rare and endangered plants or animals (or the habitat of such species), as well as substantial interference with resident fish or wildlife species, are considered to be significant adverse impacts.

Vegetation

Development of proposed General Plan uses will affect native vegetation and existing plant species within the Calistoga city limits. Vacant parcels have been designated with rural residential, medium density residential, high density residential, planned development, commercial, and light industrial uses. Mt. Washington is proposed with Planned Development uses. This land use designation will significantly impact native plants observed on the mountain based on ultimate land uses. In addition, development is proposed adjacent to the Napa River and Blossum, Garnett, and Cyrus Creeks. Vegetation in wetlands, marshlands near the geyser, other waterways, small artificial wetlands on spa properties, native stands of oak trees, and wetland sinks near Mt. Washington will also be impacted.

Identification and designation of environmentally sensitive areas to low intensive and low density uses such as recreation as well as incorporation of clustered urban uses will, in conjunction with site-specific measures, partially mitigate significant impacts. These impacts remain significant until further site-specific analysis is completed.

Wildlife

Destruction of any riparian or woodland habitats will impact wildlife species. Areas of greatest potential impact include Mt. Washington and riparian corridors along Calistoga's waterways and creeks. Preservation of riparian habitat and identification of native habitats and biological resources will, in conjunction with site-specific analysis, mitigate significant impacts. These impacts remain significant until further site-specific analysis is completed.

Threatened and Endangered Species

Destruction of riparian or woodland habitats will affect wildlife. Any destruction of habitats along waterways will potentially impact the peregrine falcon and prairie falcon both listed as "endangered" by state agencies. The peregrine falcon is also listed as endangered by federal agencies. Identification and preservation of sensitive habitat areas in conjunction with site-specific analysis will mitigate significant impacts.

The Calistoga popcorn flower and Napa bluegrass are not anticipated to be significantly impacted by the General Plan Update. Land uses are proposed only for property currently within the existing City limits. These two species have only been observed at one location

within the City limits, near the Soaring Center landing strip. This property has been designated for the most part with an airport designation, A (Airport). Uses will be limited to airport and airport related uses. Current plans do not call for an expansion of airport uses. Any future expansion of existing or future uses or structures will require discretionary review and a biological study.

CUMULATIVE IMPACTS

Buildout of the proposed project in conjunction with past, present, and reasonably foreseeable development will have a cumulative impact on native vegetation, wildlife, and threatened and endangered species.

MITIGATION MEASURES

80. Due to the presence of endangered species, the City shall require all work associated with wetlands to complete botanical surveys and obtain environmental review prior to any modifications.
81. The City shall ensure that all waterways are managed as coherent ecological systems. All undeveloped waterways shall be buffered to prevent development and encroachment as follows:
 - a. For minor tributaries, a minimum of 30-foot setbacks shall be required from the top of the high bank.
 - b. For the Napa River, a minimum setback of 50 feet shall be limited to access for maintenance, erosion control, and pedestrian/bicycle pathways.
 - c. Within setback zones, cross fences shall not be allowed, and the zones shall not be used for alternative purposes including, livestock grazing, lawn clippings, or trash disposal.
 - d. The City shall prepare a study analyzing the feasibility of placing riparian vegetation corridors and linear parks in wetland sinks located along water courses, geothermal marshes and seasonal creeks in the City.
82. The City shall prepare an amendment to the Tree Preservation Ordinance specifically addressing the City's oak and historic trees.

83. Through the environmental review process, the City shall require a study of native habitats and biological resources where appropriate by a qualified biologist prior to development.
84. The City shall protect watercourses and watersheds as follows:
- a. Development proposed in erosion-prone areas shall be required to include a soils and hydrological analysis for environmental review.
 - b. The City shall review all County policies and development proposals in watersheds. The City shall encourage the County through the environmental review process to protect watersheds.
 - c. The City shall investigate methods to improve water quality to enhance fisheries and public use.
 - d. The City shall seek Urban Stream Restoration grant funds to help bank stability and improve water quality.
85. The City shall limit Mt. Washington and Mt. Lincoln, Oat Hill Trail Road, and other recreational areas to low intensive uses such as: bicycle and hiking trails, educational signage, benches and fending in accordance with the Land Use Elements.
86. The City shall ensure that all waterways are buffered to prevent development and reserve the Open Space associated with rivers and streams in Calistoga.
87. In conjunction with site review or use permit approval, the City shall require a detailed grading and landscaping plan for new developments. The plan shall be reviewed by the Planning Development for its treatment of hillsides, forest lands, sensitive areas, viewsheds, and other aesthetic features.
88. The City shall prepare hillside design guidelines and zoning controls to protect slope stability, minimize soil erosion, preserve natural vegetation and scenic vistas.

LEVEL OF SIGNIFICANCE

Impacts found to be insignificant include minor disturbances to the Calistoga Popcorn flower and Napa bluegrass.

Impacts mitigated to a level of insignificance include disturbances to peregrine and prairie falcons, loss of native vegetation, impacts to wildlife species and impacts to the Napa River, Blossom, Garnett, and Cyrus Creeks, and other waterways.

Significant impacts partially mitigated by implementation of mitigation measures include disturbances to vegetation on Mt. Washington, in wetlands, marshlands near the geyser, small wetlands on spa properties, and wetland sinks near Mt. Washington.

The project in combination with other past, present, and reasonably foreseeable projects in the region will have a cumulative impact on biological resources.

PUBLIC SERVICES AND UTILITIES

INTRODUCTION

Public services in Calistoga are a main determinant of the City's existing and future development. Of the services discussed in this section, the development of water and wastewater services are the major issues that the City faces. In addition to these services, fire protection, police protection, storm drainage, solid waste, schools, library services, gas, electric, parks, telephone, and other governmental services are discussed.

EXISTING CONDITIONS

Fire Protection

The project area is served by the City of Calistoga Volunteer Fire Department located at 1113 Washington Street and the California Department of Forestry located at 3535 St. Helena Highway. The City of Calistoga Fire Department is equipped with two 1,250 gallon per minute (gpm) pumpers, one 750 gpm pumper, one rescue vehicle, two tanker trucks, and one attack truck for wildland fires. The equipment is up to date and in good condition. The California Department of Forestry provides dispatch services to the City's Fire Department.

The Fire Department is staffed by 24 volunteer and 7 auxiliary firefighters. The Department has initiated a program to recruit additional auxiliary firefighters. Response times out of the station are usually less than 3 minutes. Currently the City has 183 fire hydrants that deliver between 500 gallons per minute and 1,000 gallons per minute (phone interview, Mark Thomas and Jerry McCormick, October 6, 1989).

In recent years, the Department has experienced an increase in calls from approximately one call per week to approximately 1.5 to 2 calls per day. The increase in calls is due to medical service calls from the elderly in mobile home parks and to medical service calls from spas related to increasing tourism.

Increases in calls have strained volunteer staff. Employers of the volunteers cannot always release their employees. This has resulted in a loss of volunteers. The Department requires the addition of three paid professional firefighters to the staff of volunteers. Budget constraints have prevented staff augmentation (phone interview, Mark Thomas, November 17, 1989).

Police Protection

Police services are provided to the City and vicinity by the City of Calistoga Police Department. The Department operates out of its headquarters at 1232 Washington Street

and has nine sworn officers, including the Police Chief and two sergeants. The Department is aided by three part-time reserves and four dispatchers. The Department has assigned each sworn officer one patrol vehicle and is capable of responding to calls on a three minute average. The most common crime in Calistoga is theft and all offenders must be taken to the City of Napa jail for incarceration. The City of Calistoga maintains mutual aid agreements with all area law enforcement entities (La Casa Grande Resort Hotel EIR, April 1989).

Currently, an additional police facility is proposed at the intersection of Washington Street and 1st Street in Calistoga. The facility will be located across from the existing City Hall and the museum and will be 3,000 square feet in size (Richard Spitler, Planning and Public Works Director, November 7, 1989).

Water

Three sources of water supply the City of Calistoga: the Kimball Reservoir, the Fiege well field, and the North Bay Aqueduct (Lake Hennessy water). The Ghisolfo Reservoir (Kimball Dam) was completed in 1939 and raised in 1948. The installation of flashboards at the spillway crest increased the safe yield of water from 120 million gallons to 140 million gallons. The water is settled, filtered, and chlorinated before entering the distribution system. The use of water is curtailed during the rainy season due to sediment problems. The installation of a clarifier is necessary to meet state water quality standards for turbidity. New water quality standards must also be met by 1993.

The City was awarded a grant from the Farmers Home Administration to complete the clarifier project. In addition funds remain available from the North Bay Aqueduct (NBA) pipeline project. Other revenues are also required to fund the project. Construction bids for the clarifier have been prohibitive in cost. The City has authorized the preparation of a bid to make water quality improvements (excluding the construction of the clarifier). These improvements include: longer chlorine contact time, a higher backwash, water flowrate, a new step in the backwash process, and filter to waste.

The Fiege well field consists of three bedrock wells and a one-million gallon storage tank. Bedrock wells draw water that has accumulated in the rock fissures of the surrounding area, and usually have a maximum capacity of only 50 to 100 gallons per minute (gpm). This yield is in sharp contrast to wells drilled in gravel aquifers that typically have capacities of 1,000 to 2,000 gpm. In addition to low yields, it is not uncommon for bedrock wells to run dry by the end of each summer before being recharged by the winter rains (Water Management Plan, January 1986).

The uncertainty of the well water supply has forced the City to operate these wells during periods of high demand, May through September. The total capacity of these three wells is approximately 65,000 gallons per day. Operating experience has proven that there is

enough water stored within the surrounding area to allow these wells to operate twenty-four hours per day during the above period. The well-source water has a high mineral content and must be chemically treated, filtered, and chlorinated prior to entering the distribution system via the million gallon storage tank (Water Management Plan, January 1986).

Prior to the completion of the City's NBA Pipeline in 1984, Calistoga was experiencing a severe water shortage. The pipeline conveys water from Lake Hennessey (Conn Creek). The amount of water available to Calistoga through the pipeline is regulated under an agreement between the City of Calistoga, the City of Napa, and Napa County Conservation and Flood Control District.

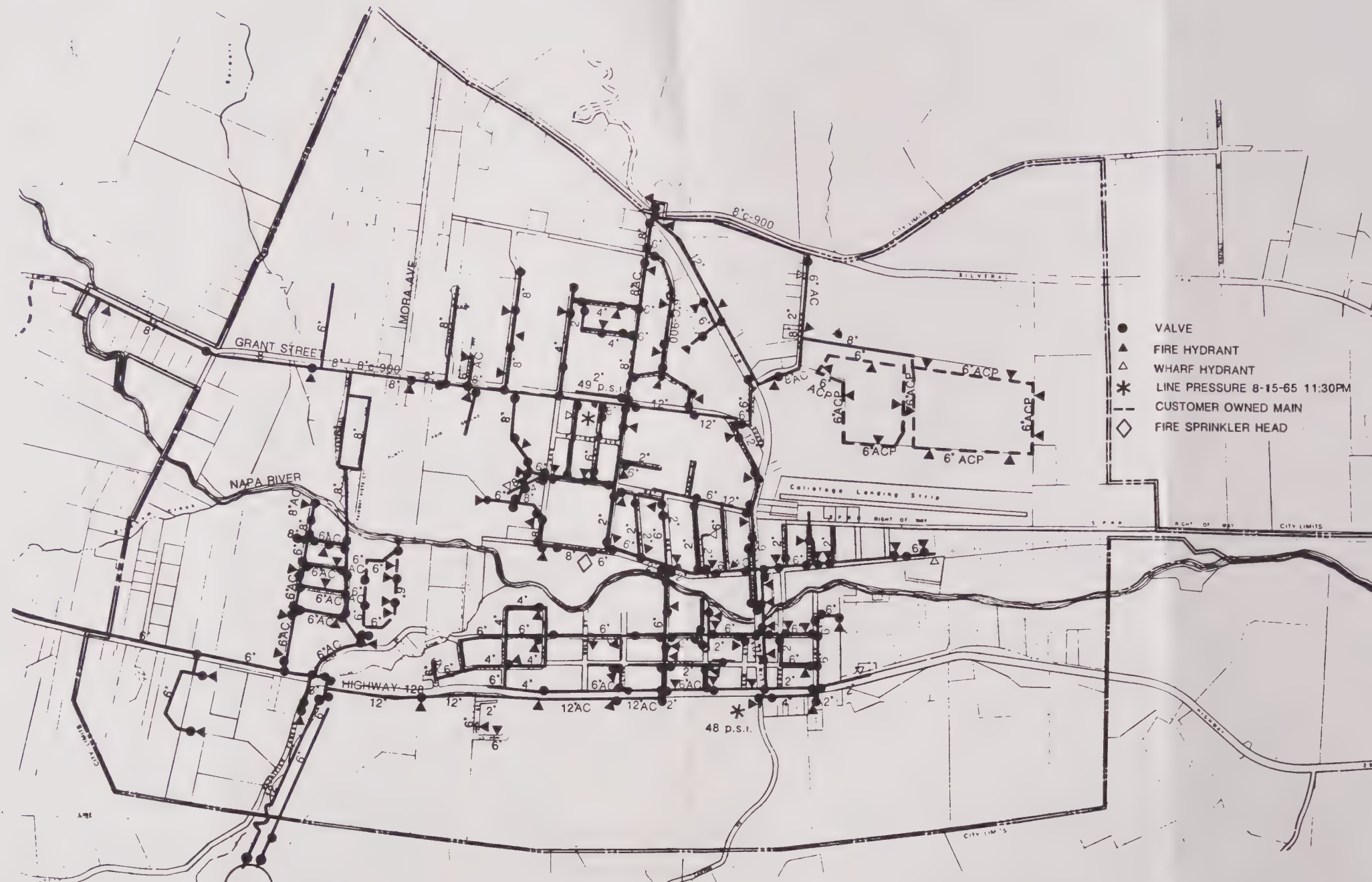
The City subsequently adopted a Resource Management System (RMS) whereby Calistoga's water supply allocation increases in stepwise fashion, with increases of 20 acre-feet per year up to a maximum allocation of 500 acre feet/year in the year 2003. Of the 20 acre-feet, 16 acre-feet are available to serve growth and 4 are assumed to be lost in the system. The RMS allocation for 1988-89 is 240 acre-feet.

NBA usage in 1987 and 1988 was 518 acre feet. As stated above, the total entitlement is 500 acre feet (Outdoor Resorts EIR, March 1989; Memo, 10/31/88 Jim Hughes to Mayor and City Council).

The RMS allocation system was updated in 1987 and additional revisions have been proposed. The allocation system provides a framework within which to evaluate future developments, land uses, improvements, and modifications. It also establishes a schedule of water consumption for uses.

The City's water distribution system is depicted in Exhibit 19. The majority of the lines consist of 6 to 8 inch diameter piping. Water pressure is low in some areas. The disrepair of the system has resulted in water leakage. If leaks were repaired, approximately 100 acre feet/year could be saved. The City's water system requires update and repair in order to meet future demand (Richard Spitler, Planning and Public Works Director, November 7, 1989).

While resident and transient daily water use has remained stable and consistent, the dramatic increase in existing commercial and industrial use has pushed existing sources past the City's available limits. Data for the two year period Fiscal Year 1986 to Fiscal Year 1988 show significant changes in use rates. The percent increases for this two year period are as follows: Total Sales, 27.5%; Residential, 3%; Transient, 25%; Commercial, 66%; and Industrial, 314%. The increase in Industrial sales is primarily due to bottling works and is far in excess of Use Permit quotas.



- VALVE
- ▲ FIRE HYDRANT
- △ WHARF HYDRANT
- * LINE PRESSURE 8-15-65 11:30PM
- - - CUSTOMER OWNED MAIN
- ◇ FIRE SPRINKLER HEAD



WATER SYSTEM
 GENERAL PLAN UPDATE
 ENVIRONMENTAL IMPACT REPORT
 City of Calistoga

Source: City of Calistoga



Exhibit 19

Metered water usage for the past two months and total of Fiscal Year 1988-1989 is summarized on Table CC. Single-family residential uses were the highest consumer at 240.46 acre-feet for the Fiscal Year. The second largest consumers were the bottling works at 159.44 acre-feet for the Fiscal Year. Total water use equalled 810.54 acre feet. Actual production of water equalled 1,000 acre feet for the year. Approximately 190 acre feet are lost in the system due to backwash, hydrants and leakage. To help meet water demand the City contracted for 500 acre-feet of water from Yuba County, for the period April 1989 to January 1990. In addition, the City has applied for additional rights at Kimball Dam equalling 857 acre feet.

To meet current water demand and provide for future land uses as identified in the General Plan, the City Council has directed the Public Works Department to prepare a water development plan. Tentatively, seven different options have been posed:

- 1) NBA Contract Negotiation - Open discussions with the Napa County Conservation District and City of Napa regarding increase in NBA allocations or direct long term purchase of additional water.
- 2) Fiege Canyon Well Field - Investigate increasing production of existing wells and the potential for developing additional wells.
- 3) Flynnville wells - Open discussions with existing owners for testing and possible access or acquisition potential.
- 4) Pacheteau Wellsite (Flynnville) - A fresh water well was developed by the E.M.L. Corporation as part of a proposal to develop the Pacheteau resort area.
- 5) Solari Wellsite - Open discussions with existing owners for testing and possible access or acquisition potential.
- 6) Dredging of reservoir - Evaluate existing information and update engineered estimates and feasibility.
- 7) Raise dam - Evaluate existing information and update engineered estimates and feasibility.

The resource list is considered the most viable source for analysis in a new water development plan (Memo, Jim Hughes to Mayor and City Council, March 1, 1989).

TABLE CC
FISCAL YEAR 1988-1989
METERED WATER CONSUMPTION (ACRE-FEET)

USE	MONTH		TOTAL FY 88-89
	MAY 89	JUNE 89	
Single Residence	21.02	27.66	240.46
Multi-Residences	8.65	9.29	102.21
Restaurants	1.5	1.82	19.69
Commercial General	4.21	5.13	48.25
Bed and Breakfast	1.10	1.31	12.87
Medical Care	1.64	2.05	17.44
Transient General	2.52	2.86	40.52
Public Buildings	1.02	1.39	10.39
Spas	4.06	4.30	45.29
Laundries	.52	.56	5.89
Bottling Works	13.76	12.80	159.44
Mobile Homes	8.22	10.04	93.09
Industry General	.08	.24	2.04
Campgrounds	.21	0	12.95
TOTAL	68.64	79.50	810.54

Source: City of Calistoga

Wastewater

The City of Calistoga provides wastewater treatment to residents and businesses. The City's wastewater treatment system is shown on Exhibit 20. Sewage lines range from six to ten inches in size. Like the water distribution system, the wastewater collection system is in disrepair. In addition, the wastewater treatment plant is in need of upgrading to meet water quality standards to meet capacity demands.

During the winter months with increasing rains, storm and groundwater flows increase and overtax the wastewater collection system and treatment. Higher flows affect deteriorating pipes and joints. Increased inflow and infiltration increases treatment costs.

The original wastewater treatment and disposal facilities were constructed and put into operation in 1961. The process facilities included a headworks, a primary sedimentation tank, two oxidation ponds, and a sludge digester. In 1971, post-chlorination of the effluent was added. In 1976, the plant was modified, adding tertiary treatment facilities. The tertiary expansion project included adding grit removal facilities, an aeration pond, algae drying beds, a flocculator, a final clarifier, pressure filters, a clearwell, and a land application system. In addition, the Recirculation Structure and Oxidation Pond No. 1 were modified. Subsequently, a reclaimed wastewater transmission pipeline was constructed and placed in operation in May 1980. Additional chlorination facilities were installed in 1981 and mechanical surface aerators were installed in Oxidation Pond No. 1 in 1986. Reclaimed wastewater irrigation facilities have been continually upgraded and expanded to meet the increasing demand for land disposal of the treated wastewater (Kennedy/Jenks/Chilton 1988).

The City of Calistoga provides wastewater treatment to residents and businesses. The Calistoga wastewater treatment plant presently serves a population of 5,000 people (including a daily transient population of 700) with an influent permitted average dry weather flow of 0.62 mgd. The existing treatment facilities provide a secondary treated effluent that meets standards for BOD and suspended solids concentrations of less than 30 mg/1 and median coliform of 23 MPN/100 ml, and a tertiary treated effluent that meets standards for BOD and suspended solids concentrations of less than 10 mg/1, median total coliform concentration of less than 2.2 MPN/100 ml, and turbidity of less than 2 NTU. The tertiary treatment meets the requirements, as stipulated in Article 4 of Title 22, Division 4 of the California Administrative Code issued by the State Department of Health Services, for landscape irrigation of golf courses, lawns, parks and playgrounds where the public has access (Kennedy/Jenks/Chilton 1988).

According to information provided in the Outdoor Resorts Draft EIR prepared in March 1989, the plant has a rated design capacity of .62 million gallons/day average daily dry-weather flow (ADDWF). A wet-weather limitation is not stipulated in the plant's waste discharge permit from the Regional Water Quality Control Board. In 1987 and 1988 flows



Source: City of Calistoga



WASTEWATER SYSTEM

GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT
City of Calistoga



Exhibit 20

were in excess of the rated capacity due to greater than expected flows from the mineral water companies and spas. As of May 1988, about .3 mgd of the total flow was due to these two sources of non-domestic flow.

The average dry weather flow permit limitation described previously is based on disposal capacity which reflects land disposal rates. Permanent land disposal sites include:

- golf course
- high school
- City irrigation fields
- City perc ponds
- little league fields
- Maximum field property (min. of 1,000 GPD)
- Calistoga Mineral Water

There are also sites where tenure is not secure:

- Fox Property
- Airport
- Frediani Storage Ponds (10 MG)

These sites are available on a month-to-month basis and may be terminated by the owner at 30 days notice. These sites are used regularly for disposal. Should these sites become unavailable, disposal capacity would be reduced.

The RWQCB has not found it necessary to impose a moratorium on new sewer connections because the water supply limitation has already created a moratorium on growth. The RWQCB recommends that each large multi-unit development, commercial or industrial development, proposal should be required to address the City's ability to treat its wastewater discharge (Jim Hughes, Memorandum May 17, 1988). Typical wastewater generation rates for Calistoga's customers are 151 gallons per day per residential unit, and 169 gallons/day per transient lodging unit (Outdoor Resorts EIR, March 1989).

In order to rectify existing deficiencies and plan for future growth, Wastewater Treatment and Disposal Facilities Plan Updates were prepared in 1986 and again in 1988. The May 1988 10-year plan outlines modular improvements and associated costs necessary to achieve certain increases in rated plant capacity between 1988 and 1997. Various improvements to the plant are designed to allow the quality of effluent to be maintained under higher wet weather flow conditions. Table DD outlines step-wise increases in capacity discussed in the 1988 Plan.

TABLE DD
TREATMENT PLANT CAPACITY

YEAR	MGD (Million Gallons/Day)	
	ADDWF	WET WEATHER FLOW
1988	.75	
1989	.83	1.2
1990	Various improvements, no capacity increase	
1993-94	.95	2.0
1998-2000	.95+	3.0

Source: Outdoor Resorts EIR, March 1989

In December 1988, following an on-site inspection, the Regional Water Quality Control Board sent a report notifying the City that it was behind schedule in completing the planned 1988 improvements to increase its capacity rating to .75 mgd. At such time as the improvements were completed the City could then demonstrated to the Board that it was meeting the water quality standards for tertiary effluent to allow its permit to be amended to .75 mgd ADDWF (Outdoor Resorts EIR, March 1989).

The Draft 10-Year Plan was given to the Board for review at the December visit, but the Board does not approve the Plan in its entirety. It remains for the City to demonstrate that each of the stepwise increases in capacity have been implemented by showing that under the higher flows, water quality standards in the effluent are being maintained.

The RWQCB has requested that the City submit a budget plan, showing how the funds to finance the necessary improvements will be forthcoming. Funds to finance the necessary sewer improvements come from developer fees for new growth. This system has been in place since the early 1980's. The City has established sewer connection fees of \$1,575 per residential unit or per connection as well as fees for uses generating wastewater in commercial or industrial buildings such as clothes washers, dishwashers, sinks, toilets, etc. In addition, the City has imposed a one-time delivery fee of \$1,212 per person or person-equivalent for residential and hotel/motel facilities and \$1,212 per employee, divided by the number of restrooms, for industrial or other business uses. The purpose of this fee is to offset the costs of expanding the sewage treatment plant to accommodate increased flows from growth. The cost of the improvements necessary to increase capacity to .75 mgd are \$320,000 and the full cost of the 10-Year program was estimated, per the June 1987 resolution at \$2,598,000 (Outdoor Resorts EIR, March 1989).

Several Priority 1 improvements are identified in the City's 1988 Wastewater Treatment and Disposal Facilities Plan Update. The purpose of the Priority 1 Improvements is to rectify NPDES permit violations, correct deficiencies and accommodate average dry weather flow at .75 mgd for a 1 in 10 dry year. Of twelve actions to be completed by 1989, two have been implemented: improvement of pond effluent disinfection, and modification of flow monitoring (Steve Anderson, October 1989).

In addition to planning and implementing improvements, the City has been adhering to a source control plan to limit flows and improve effluent quality. This program includes (1) industrial adherence to the "national pre-treatment program", (2) successful reduction of flows based on recently increased sewer use rates; and (3) conservation education of the City's consumers. The development and implementation of source control measures by the City and cooperation of the commercial and industrial users has resulted in a dramatic decrease in total influent to the plant. Calistoga Mineral Water Company through the installation of a water reclamation system is primarily responsible for this dramatic decrease (Memo, Jim Hughes to Mayor and City Council, September 2, 1988).

Storm Drains

The current storm drain system is depicted on Exhibit 21. As indicated the system is extensive in the developed portions of the City. The system is now inadequate for current and future needs since it is old, undersized, and difficult to maintain. Currently, funds are insufficient to repair identified problems. A Capital Improvement Plan (CIP) is necessary to address the system's upgrade. The status of the storm drain system has become a deterrent to development (Richard Spitler, Planning and Public Works Director, November 7, 1989).

Solid Waste

The City of Calistoga is served by the Cloverflat Landfill which is located south of the City of Calistoga in the northwestern portion of the County. This facility has been accepting solid waste from this area since 1963. The primary waste hauler is the Upper Valley Disposal Service. The landfill receives approximately 33,000 tons of municipal solid wastes per year consisting of residential wastes, debris-box material, commercial and industrial wastes, and plant debris. The landfill also receives plant debris from Yountville especially during the fall (Emcon Associates, May 1989).

The current refuse fill area occupies 12 acres of a 112-acre parcel, which will reach capacity in approximately 6 to 8 years (1995 to 1997). The landfill is currently proposing expansion to increase the refuse fill area to 43 acres. The expansion would add approximately 28 years to the remaining 6 to 8 years of site life (Emcon Associates, May 1989) and would adequately serve the City's needs.

Schools

The City of Calistoga is served by the Calistoga Joint Unified School District. The District operates three main facilities: Calistoga Elementary School (K-6), Calistoga High School (7-12) and a continuation school (9-12). The District serves the City and County residents located in the upper northwest corner of the County. Currently six students live outside of the district and attend schools within the Calistoga Joint Unified District, and twenty students live within the district, but attend schools outside the district.

Enrollment data is provided by the State Office of Local Assistance each year. The most recent figures became available in March 1989. For the 1988/89 school year the average daily attendance totaled 783. Table EE shows the Estimated Average Daily Attendance beginning with the 1985/86 school year through 1988/90. Currently, the Elementary School is at capacity. The High School has enough space for 50 to 60 more students. Due to the small amount of campus space, the District is considering the purchase of another school site (John Burke, October 1989).



Source: City of Calistoga

STORM DRAIN SYSTEM

GENERAL PLAN UPDATE ENVIRONMENTAL IMPACT REPORT City of Calistoga

STA inc.
no scale



Exhibit 21

TABLE EE
ESTIMATED AVERAGE DAILY ATTENDANCE

LEVEL	YEAR			
	85/86	86/87	87/88	88/89
K-6	364	389	419	435
7-8	104	108	109	119
9-12	185	184	198	229
TOTAL	653	681	726	783
Annual Change		28	45	57

Source: State Office of Local Assistance, March 30, 1989

Library

The Napa City County Library provides library service to the City of Calistoga. The branch library is located at the northwest corner of Lincoln Avenue and Myrtle Street. The Library provides 38 hours of service per week. Library personnel include two library assistants and one vocational assistant. It is a full service library providing books, magazines, and other items.

Though the County feels adequate capacity exists to serve the local area, there are several constraints. Library service hours have been reduced. Relative to other libraries, the volume of books is low. The building requires improvement due to its age and demand for increased volumes. In addition, off-street parking is not available. Improvements will be necessary to meet the needs of the growing senior citizen population.

Parks

Four parks are located within the City of Calistoga. Heather Oaks and Pioneer Park contain playgrounds and picnic areas. The two other parks are Avila Memorial Park and Fireman Park.

Gas

Pacific Gas and Electric (PG&E) provides gas service to the City. Gas service is provided from a feeder main that comes up from the south along Highway 29. The majority of accounts are standard pressure natural gas services.

Electric

Electric service is provided by Pacific Gas and Electric (PG&E). One substation and two 12,000 volt electrical distribution circuits serve the project area. The majority of accounts are single phase 120/140 volt electric services.

Telephone

Telephone service is provided by Pacific Bell and operates a central office in Calistoga. Service demands are calculated by a minimum of one telephone per household and by the size of business and commercial facilities. There are currently no problems in servicing the Calistoga area.

Other City Services

City administrative services are scattered throughout the City. The majority of administrative services are housed in the old City Hall located at 1232 Washington Street.

Planning and Public Works divisions are located in trailer facilities at 414 Washington Street. These facilities may not be adequate to accommodate growing staff needs.

In addition, the Community Center located at 1307 Washington Street is in need of expansion. This is due to the growth of the general population as well as the senior citizen population.

IMPACTS

For purposes of this EIR, expansion of existing services due to project demand does not constitute a significant impact unless the provider anticipates great difficulty in providing increased services.

Please refer to Table FF for a summary of service demands for selected public services and utilities.

Fire Protection

The primary impact on fire services will be the need for seven full-time members of staff in addition to the three that are currently needed. This number was generated using an assumption that for every 1,000 increase in population, 2 additional firefighters are necessary. It is anticipated that additional equipment and space may also be necessary to meet future demands on fire protection. This is considered a significant impact that can be mitigated to a level of insignificance through the expansion of staff and facilities.

Police Protection

Impacts on police service will include the need for an addition of seven full-time members of staff. This number was generated assuming the need for an addition of 2.2 members of staff for each 1,000 increase in population. Additional equipment and facilities may also be needed. This is considered a significant impact that can be mitigated to a level of insignificance through the expansion of staff and facilities.

Water

The current water reserves are inadequate for the projected growth. As of 1989, the City had a total entitlement of 500 acre feet per year from the North Bay Aqueduct. Usage exceeded this level by 18 acre feet in 1988-1989. Other sources, the Kimball Reservoir and the fieve well field, constitute the remainder of the 810.54 acre feet which the City consumed in fiscal year 1988-1989. Projected growth will require an additional 914 acre feet of water per year. This water deficiency is a major barrier to future planned growth.

TABLE FF

EXISTING AND FUTURE DEMANDS FOR
SELECTED PUBLIC SERVICES AND UTILITIES

	EXISTING	ADDITIONAL	TOTAL
Population:	4,386	3,408	7,794
City Services:			
Fire: (members of staff)	31	7	38
Police: (members of staff)	12	7	19
Water: (acre feet per year)	810.54	945	1,755.54
Wastewater: (million gallons/day) ¹	.62	.690	1.31
Schools: (students)	638	864	1,502
Parks: (acres)	14	18	32
Source:	City of Calistoga		
Note:	¹ Average dry daily water flow.		

The Public Works Department has identified seven possible means of securing the needed water. In addition to needed capacity, water quality improvements are necessary to meet new water quality standards by 1993. One step in meeting these standards is installation of a clarifier on Kimball Dam. This will require substantial funding. This is considered a significant impact. Implementation of City conservation programs in conjunction with the identification and utilization of other water sources will reduce impacts to a level of insignificance.

Wastewater

Level of service will need improvement to accommodate proposed growth. Currently, structural modifications and improvements are necessary to upgrade the system to current standards. Additionally, infrastructure will need to be expanded to 3 million gallons per day to meet future growth. This constitutes a 117 percent increase over current levels. Current funds are insufficient to make identified repairs. This is considered a significant impact. Collection of funds and expansion of facilities will mitigate impacts to a level of insignificance.

Storm Drains

The City's storm drain system is inadequate for current and future needs and has impaired development. Projected growth will require expansion of existing facilities. This is considered a significant impact. Collection of funds and expansion of facilities will mitigate impacts to a level of insignificance.

Solid Waste

The City is served by the Cloverflat Landfill, located south of the City of Calistoga. The landfill will reach capacity in 6 to 8 years. The landfill is currently proposing an expansion that would add 43 years to the remaining life of the site. Approval of the proposed expansion will service the City of Calistoga and eliminate any significant impacts to solid waste services.

Schools

Growth under moderate levels will increase the number of students in the Calistoga School District by 864. This number assumes .493 students per additional household and represents an increase of 43 percent in comparison to 1988/89 figures. Please refer to Table GG for enrollment projections. This increase will create the need for an additional grammar school prior to the 1994-1995 school year. Other school sites will most likely be necessary during later phases of buildout. This is considered a significant impact. The construction of new school sites as population levels warrant will reduce impacts to a level of insignificance.

TABLE GG
PROJECTED AVERAGE DAILY ATTENDANCE

Level	YEAR					
	89/90	90/91	91/92	92/93	93/94	94/95
K-6	459	494	533	593	630	681
7-8	128	130	129	118	134	157
9-12	241	262	283	284	292	283
TOTAL	828	886	945	995	1056	1121
Annual Chg	45	58	59	50	61	65

Source: State Office of Local Assistance, March 30, 1989

Library

The City of Calistoga is served by the Napa City County Library. Existing library services are inadequate due to reduced service areas, low book volume, facility age, and lack of off-street parking. Improvements will need to be made to meet future demand. This is considered a significant impact. The upgrading and expanding of existing library facilities will mitigate impacts to a level of significance.

Parks

Projected growth will necessitate an addition of 18 acres of land for park uses. This figure was generated assuming an addition of 5 acres of parkland for each 1,000 increase in population. This is considered a significant impact. Establishment of additional parks as population increases will reduce impacts to a level of insignificance.

Gas

Additional facilities will be installed based on new business demands created by the expansion. Detailed plans of expansion areas will be required to determine if conflicts exist. This is not considered a significant impact.

Electric

Additional facilities will be installed based on new business demands created by the expansion. Detailed plans of expansion areas will be required to determine if conflicts exist. This is not considered a significant impact.

Telephone

Additional service will be provided as growth occurs. Any plans for expansion of facilities and service will require review of specific development plans. This is not considered a significant impact.

Other City Services

Administrative services and the Community Center will need to expand facilities to accommodate growth. This is considered a significant impact. Expansion of administrative and Community Center facilities will reduce impacts to a level of insignificance.

CUMULATIVE IMPACTS

No significant cumulative impacts have been identified.

MITIGATION MEASURES

89. The City shall prioritize development on infill parcels with existing public services and utilities.
90. Through a revised Resource Management System Ordinance the City shall monitor new development to ensure the adequate provision of water and wastewater services.
91. Through its corporate powers the City shall provide for the construction of the following facilities:
 - a new police facility
 - an additional fire substation on the west side of Calistoga
 - An upgraded and expanded library
 - a public swimming pool for school and recreation
 - a senior citizen center
 - new school sites as population levels warrant
 - a youth recreation center
 - City administrative services
92. The City shall provide adequate levels of staffing for all new facilities.
93. The City shall ensure that new development is phased concurrently with planned infrastructure expansions.
94. Through the Resource Management System and environmental review process, the City shall coordinate public utility provision with land development.
95. The Public Works Department shall prepare a water enhancement plan. The following sources of water, among others, will be investigated:
 - a. NBA Contract Negotiation - Open discussions with the Napa County Conservation District and City of Napa regarding increase in NBA allocations or direct long term purchase of additional water.

- b. Fiege Canyon Well Field - Investigate increasing production of existing wells and the potential for developing additional wells.
 - c. Flynnville wells - Open discussions with existing owners for testing and possible access or acquisition potential.
 - d. Pacheteau Wellsite (Flynnville) - A fresh water well was developed by the E.M.L. Corporation as part of a proposal to develop the Pacheteau resort area.
 - e. Solari Wellsite - Open discussions with existing owners for testing and possible access or acquisition potential.
 - f. Dredging of reservoir - Evaluate existing information and update engineered estimates and feasibility.
 - g. Raise dam - Evaluate existing information and update engineered estimates and feasibility.
96. The City shall use its corporate powers to collect funds for water, wastewater, and stormwater expansion and repair. Proposed system improvements will be included within the Capital Improvements Plan.
97. The City shall provide educational information on water conservation to Calistoga citizens and businesses.
98. The City shall review all Use Permits and other discretionary permits for any excessive water use above quotas.
99. The City shall prepare a water rationing plan to be used in case acute water shortages occur.
100. The City and the Regional Water Quality Control Board shall monitor commercial and industrial effluent, and issue warnings or consider fines for excessive water degradation.
101. The City shall investigate and secure tenure on effluent spray irrigation sites including, but not limited to, the following:
- Fox Property
 - Airport
 - Fredianni Storage Ponds (10 MG)

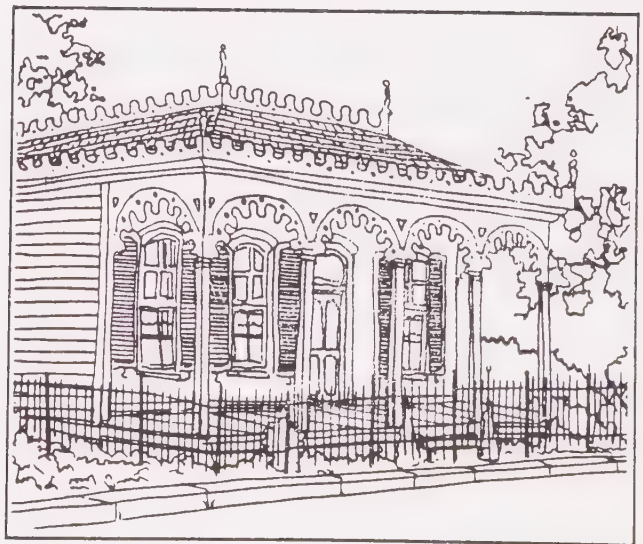
102. The City shall adopt land use regulations which limit the ability of large residential, commercial, and industrial land uses to use the cold water aquifer for uses other than landscaping purposes.
103. The City shall require new land uses to hook up to the City water supply if located nearby infrastructure. The City shall not allow the use of groundwater as the primary source of water.
104. The City shall survey all existing wells in Calistoga for compliance with the City's Backflow Prevention Program.
105. The City Fire Department shall ensure that existing and new development in fire hazard areas provide adequate clearance around structures.
106. The City shall investigate methods to improve fire apparatus access on existing streets and driveways.
107. The City shall adopt an ordinance complying with the Quimby Act provisions requiring 3 to 5 acres of open space per 1000 persons in Calistoga for the establishment of additional parks in the City.
108. The City shall initiate a comprehensive plan for development of parks and retention of open space.
109. The City shall annually update its Capital Improvements Plan to ensure that municipal systems are in good repair.
110. The City shall consider the adoption of Policies and Requirements to ensure adequate staffing levels for public services.
111. The City shall implement a program for reducing solid waste generation and encouraging recycling.

LEVEL OF SIGNIFICANCE

Insignificant impacts of the proposed project are those related to the provision of gas, electrical, and telephone service. PG&E and Pacific Bell will review specific development plans as they are proposed.

Significant impacts mitigated to a level of insignificance include the following public services and utilities: impacts to 1) fire protection, 2) police protection, 3) water, 4) wastewater, 5) storm drainage, 6) solid waste, 7) schools, 8) library, 9) parks, 10) gas, 11) electric, 12) other city services.

No unavoidable significant project-specific or cumulative impacts to Public Services and Utilities have been identified.



ALTERNATIVES

ALTERNATIVES

INTRODUCTION

The following discussion evaluates alternatives to the proposed project. Table HH provides a comparison of alternatives under consideration.

A brief description of each alternative is provided below. This section evaluates alternatives that may be capable of eliminating, or reducing to a level of insignificance, significant impacts associated with the project. Additionally, the alternatives considered environmentally superior to the proposed project are identified.

There are three alternatives that will be analyzed as part of this project. The three alternatives include the No Project Alternatives (No Development, Development Under Existing General Plan, and Alternative Location), the Low Density Alternative, and the High Density/Intensity Alternative.

NO PROJECT ALTERNATIVES

The following variations of the No Project Alternative are addressed below: no further development of any kind in the City of Calistoga, no further development of any kind beyond what is permissible under the existing General Plan, and possible alternative locations.

No Development

Description of Alternative

This alternative is required by section 15126 (d)(2) of CEQA Guidelines, which has as its intent the objective of comparing differences in environmental impacts, while considering overall project objectives. It would limit the City of Calistoga to its current balance of uses.

This alternative assumes that neither the 1977 nor the proposed General Plan will be implemented. None of the project specific impacts described in this EIR will occur. The transportation and circulation system improvements described as project mitigation will not be constructed, nor will any of the infrastructure or other community services be developed or required.

TABLE HH
ALTERNATIVES SUMMARY

ALTERNATIVE	DESCRIPTION	ENVIRONMENTALLY SUPERIOR	UNDER CONSIDERATION
No Development	This alternative would limit the City to its current balance of uses.	Yes	No
Development Under Existing General Plan	This alternative would implement the existing General Plan adopted in 1977.	Yes	Yes
Alternative Location	This alternative would implement the proposed General Plan outside the City boundaries	No	No
Low Density/Intensity	This alternative proposes less intense land uses for buildout of the General Plan.	Yes	Yes
High Density/Intensity	This alternative proposes more intense land uses for buildout of the General Plan.	No	No

Source: STA Planning, Inc.

Environmental Assessment

The existing environmental condition of the City of Calistoga is discussed in all of the environmental sections of this document. The existing conditions accurately detail existing traffic, air, and noise, and other impacts if no further development were to occur.

The No Development Alternative is environmentally superior to the proposed project and shall remain under consideration during the review process.

Development Under Existing General Plan

Description of Alternative

This alternative assumes development in the City of Calistoga under the restrictions and regulations of the General Plan adopted on March 15, 1977. A land use map of the alternative is presented in Exhibit 22.

This alternative will allow approximately 1,296 dwelling units, 533,725 square feet of retail/office space, 579 transient units, 82,240 square feet of restaurant uses, and 446,495 square feet of industrial uses.

Environmental Assessment

Implementation of the existing General Plan will increase the present population in the City of Calistoga by 2,722. A total of 2,087 jobs will be created at buildout. The following is a breakdown of the jobs by industry that will be created: retail/office 1,067, transient 93, restaurant 212, and industrial 715. This will create a demand for 1,739 dwelling units.

The implementation of the existing General Plan will have similar impacts as the proposed General Plan to land use, biology, and noise. It is anticipated that the existing General Plan circulation system will be impacted by the implementation of the existing General Plan. The existing General Plan Circulation Element does not include many improvements to the Circulation System to accommodate the 1977 Land Use Plan. Since improvements planned in the proposed General Plan will not be implemented, this alternative will worsen traffic conditions in the City. This will also worsen air quality impacts.

This alternative will require the need for the following additional city services: water (acre-feet) 760, wastewater (mg/d.) 557, schools (students) 638, parks (acres) 14, fire (personnel) 5, and police (personnel) 5.

The Development Under Existing General Plan Alternative is environmentally inferior to the proposed project but shall remain under consideration during the review process.

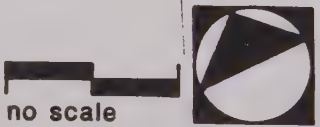


Source: City of Calistoga



EXISTING GENERAL PLAN

GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT
City of Calistoga



Alternative Location

This alternative proposes developing the proposed project in another location. CEQA requires that an alternative location for a proposed project be analyzed if one is available. Because of the nature of the proposed General Plan the identification of another location that could accommodate the objectives would locate the development outside of the City and the General Plan Study Area. Presently, cities are required to meet General Plan requirements within their own community. A location outside of the City and Study Area is not appropriate. This alternative is not a feasible alternative. It should be rejected and should not continue to be considered in the review process.

LOW DENSITY/INTENSITY ALTERNATIVE

Description of Alternative

This alternative assumes development in the City of Calistoga with a lower density than proposed in the General Plan. Implementation of this alternative assumes an emphasis in development of Rural Residential uses in remaining vacant residential areas. This alternative's land use map is depicted in Exhibit 23.

This alternative will allow approximately 915 dwelling units, 686,528 square feet of retail/office space, 445 transient units, 88,240 square feet of restaurant uses, and 446,495 square feet of industrial uses.

Environmental Assessment

Implementation of the Low Density/Intensity Alternative will increase the present population in the City of Calistoga by 1,922. A total of 2,386 jobs will be created at buildout. The following is a breakdown of the jobs by industry that would be created: retail/office 1,373, transient 71, restaurant 227, and industrial 715.

The Low Density/Intensity Alternative will result in 9,150 residential trips, 59,231 commercial trips, and 3,125 industrial trips. The total average daily trips for the Low Density Alternative will be 71,506. This will result in the following air emissions shown on Table II. The Low Density/Intensity Alternative is slightly superior to the proposed project in terms of traffic and air quality.

The implementation of the Low Density Alternative will have similar impacts to land use, biology, and noise. This alternative will require the need for the following additional city services: water (acre-feet) 545, wastewater (mg/d.) 469, schools (students) 451, parks (acres) 9.6, fire (personnel) 4, and police (personnel) 4.

TABLE II
ALTERNATIVE AIR EMISSIONS

UNIT TYPE	TOG	CO	NO _x
<u>Low Density/Intensity Alternative</u>			
Residential	104.4	1063.5	174.2
Industrial	82.5	827.7	153.1
Commercial	231.1	2230.9	444.8
<u>High Density/Intensity Alternative</u>			
Residential	269.8	2747.8	450.1
Industrial	229.1	2298.4	425.1
Commercial	380.8	3676.6	733.0

Source: STA Planning, Inc.

TOG = Total Organic Gases

CO = Carbon Monoxide

NO_x = Nitrogen Oxide

The Low Density Alternative is environmentally superior to the proposed project and shall remain under consideration during the review process. This alternative will not eliminate unavoidable significant impacts of the proposed project.

HIGH DENSITY/INTENSITY ALTERNATIVE

Description of Alternative

This alternative assumes development in the City of Calistoga with higher density uses than proposed in the General Plan. This alternative's land use map is depicted in Exhibit 24.

This alternative will allow approximately 2,307 dwelling units, 1,318,528 square feet of retail/office space, 1,735 transient units, 158,240 square feet of restaurant uses, and 735,420 square feet of industrial uses.

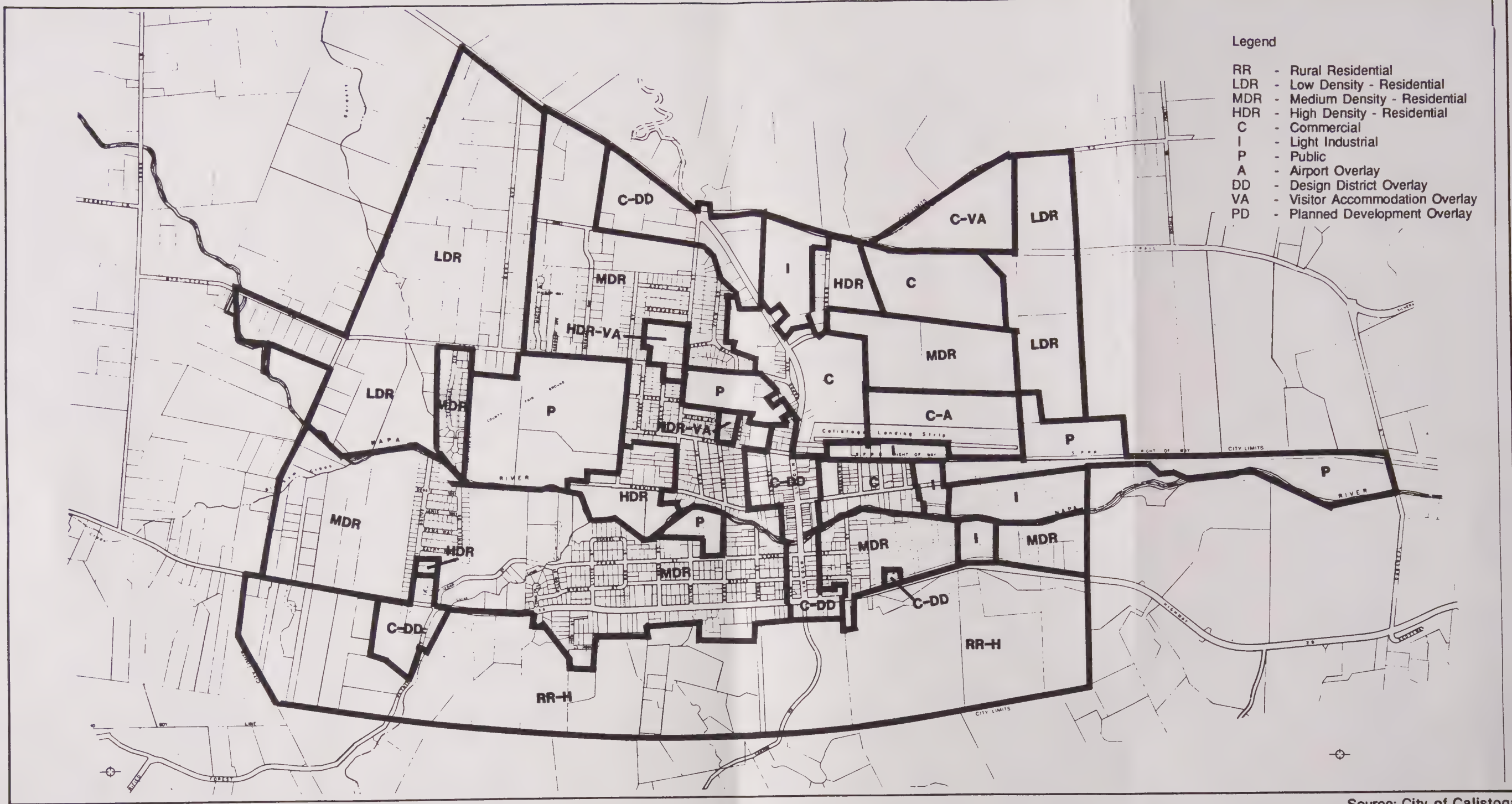
Environmental Assessment

Implementation of the High Density/Intensity Alternative will increase the present population in the City of Calistoga by 4,845. A total of 4,499 jobs will be created at buildout. The following is a breakdown of the jobs by industry that would be created: retail/office 2,637, transient 277, restaurant 407, and industrial 1,178.

Implementation of the High Density/Intensity Alternative will have slightly greater impacts to land use, noise, and biology. The High Density/Intensity Alternative will result in 23,640 residential trips, 164,546 commercial trips, and 5,148 industrial trips. The total average daily trips for this alternative is 193,334. This will result in the air emissions shown on Table DD. This alternative is inferior to the proposed project in terms of traffic and air quality.

This alternative will require the need for the following additional city services: water (acre-feet) 1,578, wastewater (mg/d.) 1.71, schools (students) 1,137, parks (acres) 24, fire (personnel) 10, and police (personnel) 10.

The High Density/Intensity Alternative is environmentally inferior to the proposed project and should be rejected from further consideration during the review process. This alternative will not reduce unavoidable significant impacts of the proposed project.



- Legend
- RR - Rural Residential
 - LDR - Low Density - Residential
 - MDR - Medium Density - Residential
 - HDR - High Density - Residential
 - C - Commercial
 - I - Light Industrial
 - P - Public
 - A - Airport Overlay
 - DD - Design District Overlay
 - VA - Visitor Accommodation Overlay
 - PD - Planned Development Overlay

Source: City of Calistoga

HIGH DENSITY/INTENSITY ALTERNATIVE

GENERAL PLAN UPDATE
 ENVIRONMENTAL IMPACT REPORT
 City of Calistoga



Exhibit 24





LONG-TERM IMPLICATIONS

LONG-TERM IMPLICATIONS OF THE PROPOSED GENERAL PLAN UPDATE

THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF THE ENVIRONMENT AND THE ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Development of the proposed land uses and circulation system will result in short-term impacts including additional traffic and construction related noise, reduction in air quality, and deterioration of water quality. Implementation of specific projects will result in an increase in the potential for localized erosion. These impacts will be mitigated on a project specific basis as consistent with the tiered structure of environmental documentation.

Long-term impacts resulting from implementation of land use designations include moderate urbanization, decreases in biological habitat and species diversity, decrease in natural topography and open space, increased demand for circulation and roadway improvements, increased demand on infrastructure and facilities to provide community services and public utilities, an increase in ambient noise levels resulting from increased traffic and urban activities, and in Napa Valley's air quality resulting from increased emissions of dust, exhaust, and other airborne particles. Other concerns include risks associated with development on or near earthquake faults and other geologically unstable sites, mitigation implemented on a project specific basis will adequately control these potential long-term impacts.

The proposed General Plan provides for comprehensive and long-term preservation of "open space land" and natural features in the Conservation, Land Use, and Open Space Elements. As such, the City has provided for incremental growth to meet housing and economic needs while maintaining the rural character and uncrowded conditions of the City.

SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

Approval of the City of Calistoga General Plan Update will direct the order and magnitude of future growth in and around the City. General Plan designation implementation will commit certain areas to urban use.

Several irreversible commitments of limited resources would result from implementation of urban/residential Land Use designations. These resources include, but are not limited to, the following: lumber and other forest related products; sand, gravel, and concrete; asphalt; petrochemical construction materials; steel, copper, lead, and other metals; and water. There will also be losses in open space, species diversity, and natural vegetation.

Future projects will add to the long-term incremental increase in noise and air quality degradation in and around the City of Calistoga.

The proposed project will involve an irreversible commitment of labor and capital investment and an increased demand for public services.

GROWTH INDUCING IMPACTS OF THE PROPOSED ACTION

The City of Calistoga General Plan Update allows for the replacement of open space with urban uses, redevelopment of land with higher intensity uses, and extension of infrastructure to previously isolated areas. Implementation of the project will provide for new growth and may stimulate the occurrence of unplanned growth.

Road extensions and commercial and industrial uses proposed in the General Plan Update may increase the desirability of new development.

The need for moderate growth exists in the City of Calistoga. The pace and nature of growth attempts to meet the consensus of the local populace.



ENVIRONMENTAL SUMMARIES

ENVIRONMENTAL SUMMARIES

INVENTORY OF IMPACTS FOUND TO BE INSIGNIFICANT

Initial Study

The following briefly describes those effects determined to be insignificant prior to the preparation of the environmental document. The following issues were indicated as having "no impact" in the Initial Study.

1. Implementation of the General Plan will not significantly alter air movement, moisture, or temperature, or any change in climate either locally or regionally.
2. Implementation of the General Plan will not significantly change currents, or the course of direction of water movements, in either marine or fresh waters.
3. Implementation of the General Plan will not increase the rate of use of any natural resources.
4. Implementation of the General Plan will not significantly interfere with an emergency response plan or an emergency evacuation plan.
5. Implementation of the General Plan will not result in a significant increase in the demand upon existing sources of energy, or require the development of new sources of energy.
6. Implementation of the General Plan will not result in a significant impact upon the quality or quantity of existing recreational opportunities.

Environmental Impact Report

The following summarizes those effects which were determined to be insignificant in the preparation of the environmental document. The following issues were indicated as having an insignificant impact in the EIR.

Land Use

1. The change in land use designation from agricultural to Rural Residential and Medium Density Residential uses is not considered a significant impact.
2. The change from agricultural to residential uses is not considered a significant land use impact.

3. Adjacent land use designations in unincorporated County of Napa are considered compatible.

Population

4. The population growth that results from the implementation of the General Plan is not considered a significant impact.

Traffic

5. Implementation of the General Plan will not significantly impact public transportation.
6. Implementation of the General Plan will not significantly impact air transportation.

Noise

7. Noise levels from the Soaring Center are within typical noise standards and are not considered a significant impact.
8. Wind machine noise will be exposed to a greater number of people, but will be offset by a reduction of agricultural operation, and, therefore, is not considered a significant impact.

Biological Resources

9. Implementation of the General Plan will not significantly impact the Calistoga popcorn flower and Napa bluegrass.

Public Services and Utilities

10. Implementation of the General Plan will not significantly impact gas, electric, and telephone service.
11. Implementation of the General Plan will not result in a significant cumulative impact on public services and utilities.

INVENTORY OF IMPACTS THAT REQUIRE TIERED ANALYSIS

Initial Study

The following briefly describes those effects that were determined to require future environmental analysis. As site-specific plans for the General Plan are considered for implementation, project-specific environmental analysis will need to address the following impacts.

Earth

1. Implementation of the General Plan may result in unstable earth conditions or in changes to geologic substructures.
2. Implementation of the General Plan will disrupt, displace, compact or uncover the soil.
3. Implementation of the General Plan may change topography or ground surface relief features.
4. Implementation of the General Plan may destroy, cover, or modify any unique geologic or physical features.
5. Implementation of the General Plan may cause an increase in wind or water erosion of soils, either on or off the site.
6. Implementation of the General Plan may increase wind or water erosion of soil, either on or off the site.
7. Implementation of the General plan may result in changes in deposition or erosion of beach sands, or changes in siltation, deposition, or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet, or lake.
8. Implementation of the General Plan may expose people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards.

Water

9. Implementation of the General Plan will change absorption rates, drainage patterns, or the rate and amount of surface runoff.
10. Implementation of the General Plan may alter the course or flow of flood waters.

11. Implementation of the General Plan may change the amount of surface water in a water body.
12. Implementation of the General Plan may result in discharge into surface water, or in alterations of surface water quality, including but not limited to temperature, dissolved oxygen, or turbidity.
13. Implementation of the General Plan may alter the direction or rate of the flow of ground waters.
14. Implementation of the General Plan may change the quantity of ground waters, either through direct additions or withdrawals, or through the interception of an aquifer by cuts or excavations.
15. Implementation of the General Plan may expose people or property to water related hazards such as flooding or tidal waves.

Light and Glare

16. Implementation of the General Plan may produce new light or glare.

Risk of Upset

17. Implementation of the General Plan may involve the risk of an explosion or the release of hazardous substances in the event of an accident or upset conditions.

Human Health

18. Implementation of the General Plan may create a health hazard or potential health hazard.
19. Implementation of the General Plan may expose people to potential health hazards.

Aesthetics

20. Implementation of the General Plan may obstruct a scenic vista or view open to the public, or may create an aesthetically offensive site open to public view.

Cultural Resources

21. Implementation of the General Plan may alter or destroy a prehistoric or historic archeological site.

22. Implementation of the General Plan may have an adverse physical or aesthetic effect on the prehistoric or historic building, structure, or object.
23. Implementation of the General Plan may have the potential to cause a physical change which would affect unique ethnic cultural values.
24. Implementation of the General Plan may restrict existing religious or sacred uses within the potential impact area.

INVENTORY OF IMPACTS MITIGATED TO A LEVEL OF INSIGNIFICANCE

Impacts associated with the following environmental issues will be mitigated to level of insignificance upon adherence to existing City policies and implementation of the project's mitigation measures.

Land Use

1. The incompatibility of adjacent commercial and residential land use can be mitigated to a level of insignificance.
2. The General Plan will have an impact on the Zoning Code.
3. Implementation of the General Plan will have an impact on the Resource Management System of the City of Calistoga.
4. Implementation of the General Plan may create land use impacts by initiating or expanding upon plans and programs that relate to land use, including an Urban Design Study, Construction of Public Facilities, Hillside Management Ordinance, and designation of a scenic highway corridor.

Housing

5. Existing infrastructure constraints may impact the City's ability to meet its fair share housing allocations for 1990-95.
6. Implementation of the General Plan may impact the availability of dwelling units for future employees, creating a project-specific and cumulative jobs/housing imbalance.
7. Implementation of the General Plan may impact the availability of affordable housing for low and moderate income households, affecting, in particular, special

needs groups such as the elderly, farmworkers, the handicapped, large families, and single-parent households.

Traffic and Circulation

8. Implementation of the General Plan will impact traffic volume and levels of service.
9. Implementation of the General Plan will impact bicycle and pedestrian facilities.

Air Quality

10. Project construction activities will temporarily impact air quality.
11. Implementation of the General Plan will have a long term impact on pollutant emissions.

Noise

12. Implementation of the General Plan, in conjunction with past, present, and reasonably foreseeable future projects, will have an incremental impact.

Biological Resources

13. Development according to proposed land use designations may impact native and riparian vegetation.
14. Disturbance impacts to any riparian or woodland habitats will be mitigated to a level of insignificance.
15. Disturbance impacts to peregrine and prairie falcon habitat along waterways are mitigated to a level of insignificance.

Public Services and Utilities

16. Implementation of the General Plan will impact the ability of fire service staff and facilities to meet demands on fire protection
17. Implementation of the General Plan will impact the ability of the police staff and facilities to meet demands for police protection.
18. Implementation of the General Plan will impact the supply of water for the City.

19. Implementation of the General Plan will impact the level of service and infrastructure for wastewater services.
20. Implementation of the General Plan will impact the City's storm drain system.
21. Implementation of the General Plan will impact solid waste services if the proposed expansion of the Cloverflat landfill is not approved.
22. Implementation of the General Plan will impact the Calistoga School District as a result of increased enrollment due to population growth.
23. Implementation of the General Plan will impact library services provided by Napa City/County Library.
24. Implementation of the General Plan will impact the ability of existing parkland to meet future park use demand.
25. Implementation of the proposed project will impact administrative services and Community Center facilities.

INVENTORY OF SIGNIFICANT IMPACTS WHICH CAN BE PARTIALLY MITIGATED

Traffic and Circulation

1. Implementation of the proposed project will impact the current parking shortfall by increasing parking demand.
2. Implementation of the General Plan, in conjunction with other past, present, and reasonably foreseeable/future projects will have a cumulative impact on regional traffic and circulation.

Air Quality

3. Implementation of the General Plan, in conjunction with other General Plans within the Bay Area Air Quality Management District, will have a cumulative impact on air quality in the region.

Noise

4. Future project developments will result in significant roadway impacts on Silverado Trail, Washington Street, Lake Street, and Berry Street.

5. Noise impacts as a result of sprint car races at the Napa County Fairgrounds are expected to result in significant impacts.

Biological Resources

6. Buildout of the proposed project in conjunction with past, present, and reasonably foreseeable development will have an incremental impact on native vegetation, wildlife, and threatened and endangered species.

INVENTORY OF MITIGATION MEASURES

Land Use

1. The City shall amend the Zoning Code to ensure that proposed commercial development abutting residential uses provides for ample building setbacks and buffering.
2. The City shall amend the Zoning Code to require multi-family structures located adjacent to single-family parcels to incorporate adequate screening into project design to prevent view intrusion.
3. The City shall amend the Zoning Code to avoid incompatible building heights.
4. The City shall prioritize development on infill parcels with existing public services and utilities.
5. The City shall discourage General Plan Amendment that affect the balance of land uses such as uses which would create a jobs/housing imbalance.
6. The City shall amend the Zoning Code to protect the integrity of residential neighborhoods by restricting non-residential uses.
7. The City shall petition LAFCO to expand its Sphere of Influence to include the Study Area.
8. The City shall ensure that the Zoning Code prohibits tourist-based business outside the downtown area.
9. The City shall locate neighborhood commercial within easy access to future residential developments.
10. The City shall amend its Zoning and Subdivision Codes to allow for adequate landscaping in non-residential areas.

11. The City shall prepare an urban design study to coordinate the development of pedestrian amenities and the character of the downtown area. The study will include:
 - Parking design and location
 - Street tree theme
 - Lighting
 - Street furniture
 - Building scale, bulk, and facade treatment
 - Sign regulations
 - Landscape standards
12. The City shall designate sufficient land only to increase visitor accommodations in order to encourage visitors to stay overnight.
13. Through a revised Resource Management System Ordinance, the City shall monitor new development to ensure the adequate provision of water and wastewater services.
14. Through its corporate powers the City shall provide for the construction of the following facilities:
 - a new police facility
 - an additional fire substation on the west side of Calistoga
 - an upgraded and expanded library
 - a public swimming pool for school and recreation
 - a senior citizen center
 - new school site as population levels warrant
 - a youth recreation center
15. The City shall ensure that new development is phased concurrently with planned infrastructure expansions.
16. The City shall retain areas for visual amenities through development controls to protect the ridgeline and provide for site and design review of all development proposals.
17. Through site and design review, the City shall ensure that proposed development shall not be visible from the valley floor. The appearance of rows of houses along the skyline shall be avoided.
18. The City shall prepare a hillside management ordinance that will address:

- development location
 - grading
 - revegetation and landscaping
 - light and glare
19. Through the environmental review process, the City shall analyze areas of ecological sensitivity in relation to proposed development.
 20. The City shall prepare an Urban Design Plan for selected entrances to the City and the downtown core area.
 21. The City, in conjunction with the County of Napa, shall obtain official designation of Highways 29 and 128, and the Silverado Trail as Official State Scenic Highways.
 22. Using citizens input, the City shall develop guidelines for each proposed scenic route corridor as required by the state, including guidelines for land use, site planning, outdoor advertising, landscaping, earth moving, and design.
 23. The City shall develop Zoning Code provisions to require that new development at the major entrances to the City be aesthetically pleasing in design, provide buffering between land uses, and retain open space and unique land features.
 24. The City shall establish a scenic highway overlay in the Zoning Code to ensure development retains scenic vistas along Silverado Trail and Lake County Highways.
 25. The City shall coordinate with the operators of the Napa Valley Wine Train to extend the service to Calistoga subsequent to environmental analysis.
 26. Through the environmental review process, the City shall analyze County-proposed developments for compatibility with adjacent City uses.

Housing

27. Through corporate and police powers, the City shall make every effort to meet its fair share of housing as determined by ABAG.
28. The City shall make use of governmental programs related to construction and rehabilitation needs of low and moderate income households. The City shall apply for and/or make applications available to the public. Funding sources include, but are not limited to:

FEDERAL (FmHA)

- FmHA Section 502 - Rural Housing Home Improvement Loan Program. Provides loans to low income households to buy, build, improve, repair, or rehabilitate owner occupied rural homes.
- Section 504 - Rural Housing Repairs Program. Provides loans and grants to very low income persons to make repairs necessary for health and safety.
- Section 523 - Self-Help Housing. Provides grants and loans to fund technical assistance to groups building units financed under 502.
- Section 523/524 - Rural Housing Sites Loan Program. Provides direct loans to private or public non-profit organizations to acquire and develop land in rural areas.

STATE

- California Self Help Housing Program. Through grants and loans to local governments and non-profit organizations, this program helps low and moderate income families construct or rehabilitate their homes.
- Predevelopment Loan Program. Low interest loans to local governments and non-profit organizations for predevelopment activities.
- Nonprofit Housing Program. The California Housing Finance Agency (CHFA) provides permanent financing for contractor-built single-family homes developed by nonprofit organizations which serve lower income families.
- Minority and Small Business Development. CHFA assists minority-owned and women-owned developers.

LOCAL

- Inclusionary Housing Program. All new residential units - five or more are required to address affordable housing through providing 10% of the units as affordable to very low, low, and moderate income households, land dedication, in-lieu fee, or reasonable alternative method.
- Make use of repayment funds from C.D.B.G. Rehabilitation board to facilitate retention, repair, and development of affordable housing units.

29. The City shall ensure that all rental property owners allow the use of Section 8 rental assistance certificates.
30. The City shall amend the Zoning Code to grant residential density use bonuses for very low and/or low income in order to comply with Governmental Code Sections 65913.4, 65915, and 65917.
31. The City shall continue to implement the provisions of the Second Dwelling Units Chapter (17.37) of the City Zoning Code.
32. The City shall keep a list of all available and appropriate federal, state, and local funding sources that support rental housing units. The City shall apply and/or provide applications to the following programs:

FEDERAL (FmHA)

- Section 515 - Rural Rental Housing Program. Provides loans to construct and rehabilitate rental and cooperative housing for low and moderate income families and elderly persons.

STATE

- Rental Housing Construction Program. Provides loans to local governments for the development of rental housing.
- The City shall apply for Proposition 77 and 84 funds for rehabilitation and construction of rental units.

LOCAL

- Inclusionary Housing Program. All new residential units - five or more are required to address affordable housing through providing 10% of the units as affordable to very low and low income households, land dedication, in-lieu fee, or reasonable alternative method.
33. The City shall encourage mixed-use development through its Zoning Ordinance.
 34. The City shall establish a housing impact fee for new businesses to help house employees for low-salaried positions.
 35. The City shall keep a list of all available state and regional programs that support housing for special need groups. The City shall apply and/or provide applications to the public. The City shall work with HCD and apply for the following programs:

- Emergency Shelter Program - Awards grants to local governments and non-profit organizations for actively aiding the homeless.
 - Senior Citizens Shared Housing Program - Provides grants to local governments and non-profit organizations helping seniors find others with whom they can share housing.
 - Office of Migrant Services - Awards grants to local governments for administration, management, operation, and rehabilitation of rental housing units for migrant families.
 - Farm Labor Housing Rehabilitation Loan Program - Provides loans to the owners of farm labor housing to bring it into compliance with the Employers Housing Act.
 - Housing Assistance Program - Provides Section 8 certificates to developmentally, mentally, and physically disabled adults. The Napa Valley Housing Authority distributes Section 8 rental certificates.
36. The City, alone or in conjunction with the County, shall investigate California Debt Limit Allocation Committee requirements for issuance of tax-exempt Mortgage Revenue Bonds (MRBs). If feasible, the City and/or County shall apply to the Committee for allocation of MRBs.
 37. The City shall provide information to developers and the public regarding the California Housing Finance Agency's (CHFA) bond financing program.
 38. The City, alone or in conjunction with the County, shall contact the California Debt Advisory Commission and investigate requirements to obtain authority for the issuance of Mortgage Credit Certificates (MCCs). The City and/or County shall work with local and real estate agencies and lenders to implement a MCC program.
 39. The City shall rezone a significant amount of land designated by the Zoning Code for Transitional uses to residential uses. Through the Zoning Code, the City shall allow limited residential units in commercial districts provided it can be done in a compatible manner.
 40. The City shall consider rezoning lands designated for commercial and industrial uses with mixed uses in order to accommodate projected housing needs.
 41. In accordance with Section 65852.3 and 65852.4 of the Government Code, the City shall revise its Zoning Code to allow manufactured homes in single-family zones.

42. In accordance with Sections 65852.7 of the Government Code, the City shall amend its Zoning Code to allow mobilehome parks on all land planned and zoned for residential uses.
43. In accordance with Section 65583(c)(1) of the Government Code, the City shall amend its Zoning Code to provide for the possibility of emergency and transitional shelters, should the need occur. Potential sites are shown on the Adequate Sites Map.
44. The City shall maintain a list that provides information on approved and proposed projects, especially projects which include rental housing. This list shall be made available to the public.
45. The City shall designate a housing coordinator to work with the Planning Department and/or with the City Administrator. Responsibilities of the Housing coordinator shall include, but are not limited to, developing a pilot program to package housing incentives and funding sources aimed at developing affordable housing, farmworker housing, emergency shelters, and other types of housing. The coordinator shall also make recommendations for use of the City's CDBG repayments funds to the City Council.
46. The City shall review its Capital Improvement Program annually to ensure that sewer/water/street improvements facilitate timely residential development.
47. The City shall review previous redevelopment studies and consider encouraging the formation of a special assessment district in the "lower Washington" area. Funds from the assessment could fund long-term rehabilitation and property upgrading programs for existing properties and structures.

- OR -

The City shall reinstitute efforts to prepare and implement a redevelopment plan for the "lower Washington area" of Calistoga, if feasible. The plan will consider replacing older multi-family units with new multi-family units for very low to low income households.

48. The City shall make use of governmental programs listed in Implementing Program 3 under Goal A of the Housing Element. In addition, the City shall apply for and/or provide applications for the following programs:

FEDERAL (FmHA)

- 533 - Rural Preservation Grant Program. Funds non-profit organizations to rehabilitate older rural homes for very low and low income families.

STATE

- Special User Housing Rehabilitation Program. Offers loans for rehabilitating residential, hotels, and other housing occupied by the elderly, disabled, and low income persons.
 - Deferred Payment Rehabilitation Loan Program. Provides loans to local governments to assist with the rehabilitation of housing for low and moderate income households.
49. The City shall annually update its Capital Improvements Plan to ensure that municipal systems are in good repair.
 50. The City shall continue to enforce the provisions of the City Municipal Code and resolutions in order to maintain existing mobilehome parks.
 51. The city shall amend the Zoning Code to be consistent with the General Plan Land Use Plan (diagram).
 52. The City shall review all loan agreements for housing assistance to ensure clauses are included which require unit owners to retain the families that occupied the units prior to rehabilitation, unless adequate cause can be shown.
 53. The City shall amend their Zoning Code to regulate the placement of Bed and Breakfast establishments in residential neighborhoods. The amendment shall regulate minimum spacing and location next to local streets to prevent the proliferation of nonresidential uses in residential neighborhoods.
 54. The City shall enact an ordinance requiring loan recipients to give one-year advance notice to the City of potential conversions to market rate units.
 55. Through its Inclusionary Housing Program, the City shall assist non-profit housing corporations in purchasing subsidy termination units.
 56. The City shall amend its Subdivision Ordinance and Zoning Ordinance to comply with the State Subdivision Map Act.

57. The City shall implement a fast-track application procedure for projects that include residential development, especially projects that include affordable housing.
58. The City shall continue to reduce, waive, or allow deferred payments of Resource Management System fees for second units, senior housing, and very low to low income housing projects.
59. The City shall promote higher density and infill development.

Traffic and Circulation

60. The City shall develop their circulation system according to the Circulation Plan and diagrams.
61. Through the Capital Improvements Plan and related impact fees, the City shall ensure that adequate funds are provided to upgrade and maintain the existing circulation network.
62. The City, in conjunction with other municipalities, shall discuss possibilities of providing transportation services to citizens. of Calistoga and the rest of the Napa Valley, including the possibility of utilizing designated cars on the Napa Valley Wine Train, a regional public bus system, or other forms of regional transportation.
63. Through the environmental review process, the City shall require proposed developments to include appropriate site planning techniques which minimize traffic impacts, and to provide necessary street improvements.
64. The City shall improve directional signing systems to help guide visitors to their destinations.
65. The City shall develop a benefit assessment district or a similar mechanism to assist in the funding of parking lot construction to meet local and tourist demands.
66. The City shall review parking facilities as part of the design review process for new or expanded development projects.
67. The City shall require repair and/or construction of sidewalks on all residential, collector and arterial streets.
68. The City shall prepare an urban design study to coordinate the development of pedestrian amenities and the character of the downtown area. The study will include:

- Parking design and location
- Street tree theme
- Lighting
- Street furniture
- Building scale, bulk, and facade treatment
- Sign regulations
- Landscape standards

Air Quality

69. The City shall implement improvements recommended in the MEA and in the Circulation Element of the General Plan. Special attention shall be given to improvements related to pedestrian and bicycle usage.
70. The City shall review all development proposals for short-term and long-term impacts to air quality.
71. The City shall support the Bay Area Air Quality Management District, and implement reasonable and feasible new regulations related to the improvements of air quality.

Noise

72. The City shall develop a comprehensive noise ordinance incorporating the provisions contained in the Technical Supplement to the Noise Element of the City of Calistoga General Plan prepared by Sound Solutions on October 23, 1989.
73. The provisions of the Noise Element and accompanying Technical Supplement shall be incorporated into the City Zoning Code.
74. The City Planning Department shall evaluate all proposed projects for noise exposure in accordance with the flow chart in Figure 4 in the Technical Supplement to the Noise Element of the City of Calistoga General Plan prepared by Sound Solutions on October 23, 1989.
75. The City Planning Department shall evaluate all proposed projects involving noise sources for noise production in accordance with the flow chart in Figure 5 in the Technical Supplement to the Noise Element of the City of Calistoga General Plan prepared by Sound Solutions on October 23, 1989.
76. The City Building Department shall develop procedures to check compliance of proposed buildings with the California State Noise Insulation Standards and noise-related provisions of the Uniform Building Code. Procedures shall also be

implemented to check for consistency between building plans and any specifications for noise mitigation measures given in required noise studies.

77. The City Planning Department shall require post-project monitoring of noise levels when appropriate to determine whether the completed project is in compliance with Noise Element standards.
78. The City shall review and comment on documents of a regional nature that pertain to noise.
79. The City shall implement all recommended improvements related to bicycle and pedestrian paths as stated in the Circulation Element.

Biological Resources

80. Due to the presence of endangered species, the City shall require all work associated with wetlands to complete botanical surveys and obtain environmental review prior to any modifications.
81. The City shall ensure that all waterways are managed as coherent ecological systems. All undeveloped waterways shall be buffered to prevent development and encroachment as follows:
 - a. For minor tributaries, a minimum of 30-foot setbacks shall be required from the top of the high bank.
 - b. For the Napa River, a minimum setback of 50 feet shall be limited to access for maintenance, erosion control, and pedestrian/bicycle pathways
 - c. Within setback zones, cross fences shall not be allowed, and the zones shall not be used for alternative purposes including, livestock grazing, lawn clippings, or trash disposal.
 - d. The City shall prepare a study analyzing the feasibility of placing riparian vegetation corridors and linear parks in wetland sinks located along water courses, geothermal marshes and seasonal creeks in the City.
82. The City shall prepare an amendment to the Tree Preservation Ordinance specifically addressing the City's oak and historic trees.
83. Through the environmental review process, the City shall require a study of native habitats and biological resources where appropriate by a qualified biologist prior to development.

84. The City shall protect watercourses and watersheds as follows:
- a. Development proposed in erosion-prone areas shall be required to include a soils and hydrological analysis for environmental review.
 - b. The City shall review all County policies and development proposals in watersheds. The City shall encourage the County through the environmental review process to protect watersheds.
 - c. The City shall investigate methods to improve water quality to enhance fisheries and public use.
 - d. The City shall seek Urban Stream Restoration grant funds to help bank stability and improve water quality.
85. The City shall limit Mt. Washington and Mt. Lincoln, Oat Hill Trail Road, and other recreational areas to low intensive uses such as: bicycle and hiking trails, educational signage, benches and fencing in accordance with the Land Use Element.
86. The City shall ensure that all waterways are buffered to prevent development and reserve the Open Space associated with rivers and streams in Calistoga.
87. In conjunction with site review or use permit approval, the City shall require a detailed grading and landscaping plan for new developments. The plan shall be reviewed by the Planning Department for its treatment of hillsides, forest lands, sensitive areas, viewsheds, and other aesthetic features.
88. The City shall prepare hillside design guidelines and zoning controls to protect slope stability, minimize soil erosion, preserve natural vegetation and scenic vistas.

Public Services and Utilities

89. The City will prioritize development on infill parcels with existing public services and utilities.
90. Through a revised Resource Management System Ordinance the City shall monitor new development to ensure the adequate provision of water and wastewater services.
91. Through its corporate powers the City shall provide for the construction of the following facilities:

- a new police facility
 - an additional fire substation on the west side of Calistoga
 - an upgraded and expanded library
 - a public swimming pool for school and recreation
 - a senior citizen center
 - new school site as population levels warrant
 - a youth recreation center
 - City administrative services
92. The City shall provide adequate levels of staffing for all new facilities.
93. The City shall ensure that new development is phased concurrently with planned infrastructure expansions.
94. Through the Resource Management System and environmental review process, the City shall coordinate public utility provision with land development.
95. The Public Works Department shall prepare a water enhancement plan. The following sources of water, among others, will be investigated:
- a. NBA Contract Negotiation - Open discussions with the Napa County Conservation District and City of Napa regarding increase in NBA allocations or direct long term purchase of additional water.
 - b. Fiege Canyon Well Field - Investigate increasing production of existing wells and the potential for developing additional wells.
 - c. Flynnville wells - Open discussions with existing owners for testing and possible access or acquisition potential.
 - d. Pacheteau Wellsite (Flynnville) - A fresh water well was developed by the E.M.L. Corporation as part of a proposal to develop the Pacheteau resort area.
 - e. Solari Wellsite - Open discussions with existing owners for testing and possible access or acquisition potential.

- f. Dredging of reservoir - Evaluate existing information and update engineered estimates and feasibility.
 - g. Raise dam - Evaluate existing information and update engineered estimates and feasibility.
- 96. The City shall use its corporate powers to collect funds for water, wastewater, and stormwater expansion and repair. Proposed system improvements shall be included within the Capital Improvements Plan.
 - 97. The City shall provide educational information on water conservation to Calistoga citizens and businesses.
 - 98. The City shall review all Use Permits and other discretionary permits for any excessive water use above quotas.
 - 99. The City shall prepare a water rationing plan to be used in case acute water shortages occur.
 - 100. The City and the Regional Water Quality Control Board shall monitor commercial and industrial effluent, and issue warnings or consider fines for excessive water degradation.
 - 101. The City shall investigate and secure tenure on effluent spray irrigation sites including, but not limited to, the following:
 - Fox Property
 - Airport
 - Fredianni Storage Ponds (10 MG)
 - 102. The City shall adopt land use regulations which limit the ability of large residential, commercial, and industrial land uses to use the cold water aquifer for uses other than landscaping purposes.
 - 103. The City shall require new land uses to hook up to the City water supply if located nearby infrastructure. The City shall not allow the use of groundwater as the primary source of water.
 - 104. The City shall survey all existing wells in Calistoga for compliance with the City's Backflow Prevention Program.

105. The City Fire Department shall ensure that existing and new development in fire hazard areas provide adequate clearance around structures.
106. The City shall investigate methods to improve fire apparatus access on existing streets and driveways.
107. The City shall adopt an ordinance complying with the Quimby Act provisions requiring 3 to 5 acres of open space per 1000 persons in Calistoga for the establishment of additional parks in the City.
108. The City shall initiate a comprehensive plan for development of parks and retention of open space.
109. The City shall annually update its Capital Improvements Plan to ensure that municipal systems are in good repair.
110. The City shall consider the adoption of Policies and Requirements to ensure adequate staffing levels for public services.
111. The City shall implement a program for reducing solid waste generation and encouraging recycling.



REPORT PREPARATION RESOURCES

REPORT PREPARATION RESOURCES

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APPENDICES

APPENDIX A
PUBLIC PARTICIPATION

NOTICE OF PREPARATION

TO: CLEARINGHOUSE
STATE OF CALIFORNIA

FROM: City of Calistoga
1232 Washington Street
Calistoga, CA 94515

SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL
IMPACT REPORT

The City of Calistoga will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which pertain to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the probably environmental effects are contained in the attached materials. A copy of the Initial Study X is, is not, attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Richard Spitler, Acting Planning Director, at the address shown above. We will need the name of a contact person in your agency.

Project Title: City of Calistoga General Plan Update

Project Applicant, if any: City of Calistoga

DATE May 17, 1990

Signature



Title Acting Planning Director

Telephone (707) 942-5188

Reference: California Administrative Code, Title 14, Sections 15082(a), 15103, 15375.

NOTICE OF COMPLETION AND ENVIRONMENTAL DOCUMENT FORM

See NOTE Below

SCH #

B-

1. Project Title: City of Calistoga General Plan Update
 2. Lead Agency: City of Calistoga 3. Contact Person: Richard Spittler
 3a. Street Address: 1232 Washington St. 3b. City: Calistoga
 3c. County: County of Napa 3d. Zip: 94515 3e. Phone: (707) 942-5188

PROJECT LOCATION 4. County: Napa 4a. City/Community: Calistoga
 4b. (optional) Assessor's Parcel No. _____ 4c. Section _____ Twp. _____ Range _____
 5a. Cross Streets: _____ 5b. For Rural, Nearest Community: _____
 6. Within 2 miles of: a. State Hwy No. X b. Airports X c. Waterways X

7. DOCUMENT TYPE

CEQA
 01 X NOP
 02 _____ Early Cons
 03 _____ Neg Dec
 04 _____ Draft EIR
 05 _____ Supplement/
 Subsequent EIR
 (if so, prior SCH # _____)

NEPA
 06 _____ Notice of Intent
 07 _____ Envir. Assessment/
 FONSI
 08 _____ Draft EIS

OTHER
 09 _____ Information Only
 10 _____ Final Document
 11 _____ Other _____

8. LOCAL ACTION TYPE

01 X General Plan Update
 02 _____ New Element
 03 _____ General Plan Amendment
 04 _____ Master Plan
 05 _____ Annexation
 06 _____ Specific Plan
 07 _____ Redevelopment
 08 _____ Rezone
 09 _____ Land Division
 (Subdivision, Parcel Map,
 Tract Map, etc.)
 10 _____ Use Permit
 11 _____ Cancel Ag Preserve
 12 _____ Other _____

9. TOTAL ACRES: _____

10. DEVELOPMENT TYPE

01 _____ Residential: Units _____ Acres _____
 02 _____ Office: Sq.Ft. _____
 Acres _____ Employees _____
 03 _____ Shopping/Commercial: Sq.Ft. _____
 Acres _____ Employees _____
 04 _____ Industrial: Sq.Ft. _____
 Acres _____ Employees _____
 05 _____ Sewer: MGD _____
 06 _____ Water: MGD _____
 07 _____ Transportation: Type _____
 08 _____ Mineral Extraction: Mineral _____
 09 _____ Power Generation: Wattage _____
 Type: _____
 10 _____ Other: _____

11. PROJECT ISSUES DISCUSSED IN DOCUMENT

01 _____ Aesthetic/Visual	08 _____ Geologic/Seismic	15 _____ Sewer Capacity	22 _____ Water Supply
02 _____ Agricultural Land	09 _____ Jobs/Housing Balance	16 _____ Soil Erosion	23 _____ Wetland/Riparian
03 _____ Air Quality	10 _____ Minerals	17 _____ Solid Waste	24 _____ Wildlife
04 _____ Archaeological/Historical	11 _____ Noise	18 _____ Toxic/Hazardous	25 _____ Growth Inducing
05 _____ Coastal Zone	12 _____ Public Services	19 _____ Traffic/Circulation	26 _____ Incompatible Landuse
06 _____ Fire Hazard	13 _____ Schools	20 _____ Vegetation	27 _____ Cumulative Effects
07 _____ Flooding/Drainage	14 _____ Septic Systems	21 _____ Water Quality	28 _____ Other _____

12. FUNDING (approx.): Federal \$ _____ State \$ _____ Total \$ _____

13. PRESENT LAND USE AND ZONING:

14. PROJECT DESCRIPTION:

City of Calistoga General Plan Update
EIR.

15. SIGNATURE OF LEAD AGENCY REPRESENTATIVE: [Signature] Date: 5-18-90

NOTE: Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project, please use that number from a Notice of Preparation or previous draft document. Please fill in the

ATTACHMENT B

INITIAL STUDY

INTRODUCTION

An Initial Study is a preliminary analysis of a proposed project prepared by the lead agency to determine whether an EIR or negative declaration must be prepared or to identify the significant environmental effects to be analyzed in an EIR (CEQA Guidelines Sec. 15365). The Initial Study for the proposed City of Calistoga General Plan will serve to focus the EIR on effects determined to be significant. In accordance with CEQA Guidelines, a checklist has been prepared which identifies potential environmental effects.

ENVIRONMENTAL PROCEDURES

In December 1989 a Master Environmental Assessment and Issues & Options (MEA) report was prepared and published. The MEA describes and assesses existing conditions, constraints, and opportunities in Calistoga. The MEA will provide a base of information for the Initial Study, Environmental Impact Report, and subsequent environmental documents prepared for the City of Calistoga.

Based on issues defined in the following Initial Study, an EIR will be prepared. The EIR will be prepared in accordance with the California Environmental Quality Act of 1970 (CEQA), as amended (Public Resources Code, Section 21000, et seq.) and the State Guidelines for Implementation of the California Environmental Quality Act of 1970 as amended (California Administrative Code Section 15000, et seq.). This report will comply with the rules, regulations, and procedures for implementation of the California Environmental Quality Act adopted by the City of Calistoga.

The EIR will be a Program EIR and part of a tiering process as defined in CEQA Guidelines Section 15152. Tiering is an effort to focus on the environmental issues which are relevant to the approval being considered. It is anticipated that future approvals related to the proposed General Plan will be able to utilize the information set forth in this Initial Study and EIR. The tiering process involves a series of approvals moving from the general to the specific with later EIR's/Mitigated Negative Declarations omitting issues fully addressed at earlier stages.

The tiering approach recognizes that not all effects can be mitigated at each step of the process. There would be some effects for which mitigation would not be feasible at an early approval stage of a particular development project. A Lead Agency may then defer mitigation pertaining to site specific effects to a later step.

Since a general plan and its elements are comprehensive and general, the proper level of environmental analysis is also general. As specific components of the revised General Plan

are proposed, more specific environmental analysis will be prepared. Any deferred mitigation will be included in later project-specific environmental analysis.

To ensure that mitigation proposed in the Initial Study will be included in subsequent environmental documentation, mitigation measures will be included in a Mitigation Monitoring Program. A Mitigation Monitoring Program is required by Section 21081.6 of the Public Resources Code. Its purpose is to ensure that proposed mitigation measures included in environmental documentation will extend beyond the pages of the document, and are implemented to reduce or eliminate significant detrimental project-related impacts to the environment.

Proposed General Plan Implementation Programs that mitigate impacts will be considered mitigation measures for the purposes of the Initial Study and EIR. Implementation programs for the General Plan will be included in the mitigation monitoring program and will be applied to every development project submitted for discretionary approvals.

INITIAL STUDY FORMAT

The following Initial Study checklist indicates with a "yes," "maybe," or "no" whether a specified impact will occur, may occur, or will not occur. For each answer, a narrative description of environmental impacts is provided in Attachment A, Initial Study Checklist Responses section. A summary of initial study conclusions is provided in Attachment B.

Following the environmental analysis, potential project alternatives to be addressed in the EIR are presented as Attachment C. This section describes a range of reasonable alternatives to the proposed project which could feasibly attain the basic objectives of the project. Objectives of the proposed project are presented in the Project Description. The alternative discussion in the EIR will evaluate the comparative merits of the alternatives.

ENVIRONMENTAL CHECKLIST FORM

Background

1. Name of Proponent City of Calistoga
2. Date of Checklist Submittal May - 1990
3. Agency Requiring Checklist City of Calistoga Planning Department
4. Name of Proposal, if applicable General Plan Update

Environmental Impacts

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
1. Earth. Will the proposal result in:			
a. Unstable earth conditions or in changes geologic substructures?	___	<u>X</u>	___
b. Disruptions, displacements, compaction or overcovering of the soil?	<u>X</u>	___	___
c. Change in topography or ground surface relief features?	___	<u>X</u>	___
d. The destruction, covering or modification of any unique geologic or physical features?	___	<u>X</u>	___
e. Any increase in wind or water erosion of soils, either on or off the site?	___	<u>X</u>	___
f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet, or lake?	___	<u>X</u>	___
g. Exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?	___	<u>X</u>	___
2. Air. Will the proposal result in:			
a. Substantial air emissions or deterioration of ambient air quality?	___	<u>X</u>	___
b. The creation of objectionable odors?	___	<u>X</u>	___
c. Alteration of air movement, moisture, or temperature, or any change in climate, either locally or regionally?	___	___	<u>X</u>

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
3. Water. Will the proposal result in:			
a. Changes in currents, or the course of direction of water movements, in either marine or fresh waters?	—	—	<u>X</u>
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	<u>X</u>	—	—
c. Alterations to the course or flow of flood waters?	—	<u>X</u>	—
d. Change in the amount of surface water in any water body?	—	<u>X</u>	—
e. Discharge into surface waters, or in any alterations of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?	—	<u>X</u>	—
f. Alteration of the direction or rate of flow of ground waters?	—	<u>X</u>	—
g. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	—	<u>X</u>	—
h. Substantial reduction in the amount of water otherwise available for public water supplies?	—	<u>X</u>	—
i. Exposure of people or property to water related hazards such as flooding or tidal waves?	—	<u>X</u>	—

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
4. Plant Life. Will the proposal result in:			
a. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?	—	<u>X</u>	—
b. Reduction of the numbers of any unique, rare, or endangered species of plants?	—	<u>X</u>	—
c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?	—	<u>X</u>	—
d. Reduction in acreage of any agricultural crop?	<u>X</u>	—	—
5. Animal Life. Will the proposal result in:			
a. Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms or insects)?	—	<u>X</u>	—
b. Reduction of the numbers of any unique, rare or endangered species of animals?	—	<u>X</u>	—
c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	—	<u>X</u>	—
d. Deterioration to existing fish or wildlife habitat?	—	<u>X</u>	—
6. Noise. Will the proposal result in:			
a. Increases in existing noise levels?	<u>X</u>	—	—
b. Exposure of people to severe noise levels?	—	<u>X</u>	—

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
7. Light and Glare. Will the proposal produce new light or glare?	<u>—</u>	<u>X</u>	<u>—</u>
8. Land Use. Will the proposal result in a substantial alteration of the present or planned land use of an area?	<u>X</u>	<u>—</u>	<u>—</u>
9. Natural Resources. Will the proposal result in an increase in the rate of use of any natural resources?	<u>—</u>	<u>—</u>	<u>X</u>
10. Risk of Upset. Will the proposal involve:			
a. A risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?	<u>—</u>	<u>X</u>	<u>—</u>
b. Possible interference with an emergency response plan or an emergency evacuation plan?	<u>—</u>	<u>—</u>	<u>X</u>
11. Population. Will the proposal alter the location, distribution, density, or growth rate of the human population of an area?	<u>X</u>	<u>—</u>	<u>—</u>
12. Housing. Will the proposal affect existing housing, or create a demand for additional housing?	<u>X</u>	<u>—</u>	<u>—</u>
13. Transportation/Circulation. Will the proposal result in:			
a. Generation of substantial additional vehicular movement?	<u>X</u>	<u>—</u>	<u>—</u>
b. Effects on existing parking facilities, or demand for new parking?	<u>X</u>	<u>—</u>	<u>—</u>

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
c. Substantial impact upon existing transportation systems?	<u>X</u>	_____	_____
d. Alterations to present patterns of circulation or movement of people and/or goods?	<u>X</u>	_____	_____
e. Alterations to waterborne, rail or air traffic?	_____	<u>X</u>	_____
f. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?	_____	<u>X</u>	_____
14. Public Services. Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:			
a. Fire protection?	<u>X</u>	_____	_____
b. Police protection?	<u>X</u>	_____	_____
c. Schools?	_____	<u>X</u>	_____
d. Parks or other recreational facilities?	<u>X</u>	_____	_____
e. Maintenance of public facilities, including roads?	<u>X</u>	_____	_____
f. Other governmental services?	_____	<u>X</u>	_____
15. Energy. Will the proposal result in:			
a. Use of substantial amounts of fuel or energy?	_____	<u>X</u>	_____
b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?	_____	_____	<u>X</u>

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
16. Utilities. Will the proposal result in a need for new systems, or substantial alterations to the following utilities:			
a. Water?	<u>X</u>	—	—
b. Sewer?	<u>X</u>	—	—
c. Storm Drains?	<u>X</u>	—	—
d. Telephone?	—	<u>X</u>	—
e. Gas?	—	<u>X</u>	—
f. Electricity?	—	<u>X</u>	—
17. Human Health. Will the proposal result in:			
a. Creation of any health hazard or potential health hazard (excluding mental health)?	—	<u>X</u>	—
b. Exposure of people to potential health hazards?	—	<u>X</u>	—
18. Aesthetics. Will the proposal result in the obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view?	—	<u>X</u>	—
19. Recreation. Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?	—	—	<u>X</u>
20. Cultural Resources.			
a. Will the proposal result in the alteration of or the destruction of a prehistoric or historic archaeological site?	—	<u>X</u>	—

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
b. Will the proposal result in adverse physical or aesthetic effects of a prehistoric or historic building, structure, or object?	___	<u>X</u>	___
c. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?	___	<u>X</u>	___
d. Will the proposal restrict existing religious or sacred uses within the potential impact area?	___	<u>X</u>	___
21. Mandatory Findings of Significance.			
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<u>X</u>	___	___
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future).	___	<u>X</u>	___
c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant).	<u>X</u>	___	___

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	—	<u>X</u>	—

Discussion of Environmental Evaluation

See Attachment A.

IV. Determination

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

—

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION WILL BE PREPARED.

—

I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

X

Date

Signature

For _____

ATTACHMENT A ENVIRONMENTAL CHECKLIST RESPONSES

1. EARTH

1a - 1g

Development of proposed General Plan Uses may result in unstable earth conditions or in changes to geologic substructures. Potential impact areas include hillside land designated for residential uses.

Development of proposed land uses will disrupt, displace, compact, or cause overcovering of soils. Grading will be required to construct most residential, commercial, office, park, and other uses. Grading may change existing topography or ground surface relief features or modify unique geologic or physical features.

Construction of proposed land uses may increase soil erosion by earthwork and other construction activities. Construction activities may result in siltation impacts to creeks and waterways.

Several earthquake faults are located in Napa County and in adjacent counties near the City of Calistoga. Moderate-sized earthquake events would be capable of producing a substantial amount of damage. (City of Calistoga, General Plan Update, Volume I: Master Environmental Assessment).

The County of Napa General Plan has identified a large portion of the Napa Valley including Calistoga to be at risk of liquefaction. (City of Calistoga, General Plan Update, Volume I: Master Environmental Assessment). An earthquake would increase chances of liquefaction.

The risk of landslides in Calistoga is estimated to be negligible to low. (Napa County General Plan, 1983).

The development of additional residential and employee generating uses would expose persons as well as property to geologic hazards noted above.

Future projects proposed under the General Plan shall comply with the following Open Space, Conservation and Safety Element Policies and Programs to reduce impacts:

Open Space Element

- B. I. 1. In conjunction with site plan review or use permit approval, the City will require a detailed grading and landscaping plan for new developments. The plan shall be reviewed by the Planning Department for its treatment of hillsides, forest lands, sensitive areas, viewsheds, and other aesthetic features.

Conservation Element

- A. I. 7. The City will require soils investigations for proposed developments in unstable areas.

Safety Element

- A. P. 1. Include when necessary a geologic/seismic evaluation as a part of required Environmental Impact Reports.
- A. P. 2. Require a geologic/seismic report.
- a. When warranted by the results of a geologic/seismic evaluation;
 - b. For new residential developments, roads, or highways proposed to be located on parcels which contain identifiable landsliding or slumps; and
 - c. For all proposed structures and facilities open to the public and serving 100 persons or more.
- A. P. 3. Discourage the development of structures such as hospitals, police and fire stations, and buildings open to the public whose occupancy exceeds 100 persons from locating within 1/8 mile of an active fault or the placement of transportation or utility corridors in or across such areas, excepting Oak Hill, unless a geologic/seismic report show such development or placement is consistent with public safety.
- A. P. 4. Encourage the completion of an inventory of existing structures such as schools, etc. and encourage strengthening where needed to improve public safety.
- A. P. 5. Develop a program for on-site inspection of grading work for developments in questionable areas to insure that bedding planes are not undercut, that proper fill material is carefully placed and compacted.
- A. P. 6. Encourage planting of vegetation on unstable slopes to protect structures at lower elevations. Utilize native plants for landscaping in the hills, to eliminate the need for supplemental watering which can promote earth movement.

Note: A, B, C, D, E = Goal
P = Policy
I = Implementation Program

- A. P. 7. Study the development of safety standards for all land within area subject to inundation downstream from water-retaining structures that might fail as a result of an earthquake.
- B. P. 1. Encourage State and Federal governments to require lending institutions to require earthquake insurance on all residential structures as a condition to the granting of a loan on such properties. The insurance could be included with a broad-coverage natural disaster insurance program.
- B. P. 2. Encourage the purchase of National Flood Insurance, which also covers damage from mudflows.
- B. P. 3. Promote a joint program between all local governmental units in Napa County to employ such additional expertise as needed to provide technical information in regard to seismic hazards, to provide technical assistance, and, over time, to prepare detailed geologic hazard maps of the County for planning purposes.
- D. I. 2. The City and County, through preparation of a study, will determine the location and extent of sand deposits that are susceptible to liquefaction.
- D. I. 3. For projects proposed in hazardous geologic areas, the City will require a geologic report that includes analysis of soils foundation, grading, erosion, and sediment control.
- D. I. 4. The City will ensure that both public and private development in areas with significant identified geological hazards are sited to minimize the exposure of structures and improvements to damage resulting from geological hazards and to minimize the aggravation of off-site geological hazards.
- D. I. 7. The City will comply with the provisions of Government Code Sections 8875 et. seq. which requires all cities and counties located within Seismic Zone 4 to inventory all of the potentially hazardous unreinforced masonry buildings within their jurisdictions.

In accordance with the tiering process, geology and soils will not be addressed in the General Plan Update EIR. Geologic/soils impacts will be addressed in site-specific environmental analysis.

2. AIR

2a - 2c

Development of the proposed land uses and circulation system may create substantial air emissions. Land uses will generate additional traffic. Additional stationary and mobile pollutant sources will increase local emissions.

The proposed project will result in a short-term increase in dust and other suspended particulates both at the site of any construction and downwind. Emissions, dust, and particulates may contribute to the deterioration of Napa Valley's ambient air quality. Proposed light industrial uses may create objectionable odors.

The development proposed under the General Plan is not anticipated to have a significant effect upon air movement, moisture or temperature, or result in any change in climate locally or regionally.

EIR Study Methodology

Air quality will be addressed in the EIR according to the following steps:

1. The existing air environment will be described in terms of meteorology, local topography affecting pollutant dispersion, and ambient air monitoring data. A summary of current air management efforts will be provided. Sensitive receptor areas within the study area will be identified.
2. Short-term dust and emission generation due to construction activities will be evaluated. Measures to reduce dust generation will be discussed.
3. Long-term emissions due to increased traffic will be calculated. These emissions will be compared to regional and subregional emissions to assess the potential for regional air quality impacts. A discussion of the project's consistency with the Bay Area Regional Air Quality Management Plan will be provided.
4. All potential project-specific and cumulative impacts will be identified.
5. Existing City policies and requirements related to defined impacts will be stated. Proposed General Plan policies or programs which address any impacts will be indicated.
6. As necessary, additional mitigation measures will be proposed.

7. Based upon existing City policies, proposed General Plan policies and requirements, and proposed mitigation measures, the level of significance for each project specific and cumulative impact will be specified.

3. WATER

3a - 3i

Implementation of General Plan components is not anticipated to change any fresh surface water currents or the course of direction of water movements.

Increased development will increase the amount of impervious surfaces changing absorption rates and drainage patterns. Surface run-off will increase. Increased run-off may increase surface water flow. Some development is proposed in the 100-year and 500-year flood boundaries as described in the MEA. This may alter the flow or course of flood water and expose persons or property to flooding.

Erosion from construction activities may increase siltation in creeks and waterways. The increased siltation may alter surface water quality.

Additional development may require the use of well water from the Fiege well field. This may alter the rate of flow of ground water. Use of well water, and mineral water from aquifers by proposed residential, commercial, and industrial activities may result in increased withdrawals of ground water. Large withdrawals of water by industries may result in substantial reduction in the amount of water otherwise available for public water supplies.

Future projects proposed under the General Plan shall comply with the following Conservation and Safety Element implementation programs to reduce water impacts:

Conservation Element

- B. I. 1. The City will protect watercourses and watersheds as follows:
 - a. Development proposed in erosion-prone areas shall be required to include a soils and hydrological analysis for environmental review.
 - b. The City shall review all County policies and development proposals in watersheds. The City shall encourage the County through the environmental review process to protect watersheds.
 - c. The City shall investigate methods to improve water quality to enhance fisheries and public use.

- d. The City shall seek Urban Stream Restoration grant funds to help bank stability and improve water quality.

- B. I. 2. The City will continue to implement improvements recommended in the Wastewater Treatment and Disposal Facilities Plan.

Safety Element

- D. I. 1. The City will initiate or support individuals who want to prepare a floodway map that more accurately reflects land elevations and incremental flood plain boundaries.

Some water quality issues will be addressed in the Public Services and Utilities section of this EIR. In accordance with the tiering process, other water issues will not be addressed in the General Plan Update EIR. Water impacts will be addressed in site-specific environmental analysis.

4. PLANT LIFE

4a - 4d

There are four major vegetation communities found within Napa County: marsh, grassland, foothill woodland, and chaparral. Most of the original native plants to Calistoga and the Napa Valley have been eliminated over time due to increased agricultural uses. The riparian communities and woodlands along the creekways in Calistoga and along the Napa River are essentially the only principal natural habitat remaining. (City of Calistoga General Plan Update, Volume I: MEA and Issues and Options).

Two rare plants are known to be present in the General Plan Study Area: Napa bluegrass (*Poa napensis*) and the Calistoga popcorn flower (*Plagiobothrys strictus*). Napa bluegrass is listed as endangered by the California Department of Fish and Game, rare or endangered by the California Native Plant Society (CNPS), and as Category 2, probably appropriate for listing as endangered or threatened, by the U.S. Fish and Wildlife Service. The Calistoga popcorn flower is a candidate species for listing as endangered by the California Department of Fish and Game. Other listings by the CNPS and U.S. Fish and Wildlife Service are the same as for the Napa bluegrass. Napa bluegrass and the Calistoga popcorn flower have been located within the city limits near the Calistoga Soaring Center landing strip and within the MEA Study Area near Tubbs Lane and Grant Avenue. (City of Calistoga General Plan Update, Volume I: MEA and Issues and Options).

The proposed General Plan land uses and policies may change the diversity of plant species or the number of species. Proposed land development and/or geothermal development

may impact native habitats and rare or endangered plants. Landscaping associated with new development may introduce new species of plants into the Study Area. New development and landscaping may result in a barrier to the replenishment of existing species.

Build-out of proposed General Plan land uses will reduce existing agricultural production within the City.

EIR Study Methodology

Plant life will be analyzed in the Biology section of the EIR. The following methodology will be used:

1. The MEA and any other existing documentation will be used to describe existing conditions and analyze the impacts of proposed land uses upon known locations of native and rare plants.
2. Acreages of agricultural lands to be converted to urban uses will be calculated.
3. All potential project-specific or cumulative biology impacts will be defined.
4. Existing and proposed City Policies and Requirements related to the defined impacts will be indicated.
5. Mitigation measures will be developed as necessary for any impacts.
6. Based upon existing City policies, proposed General Plan policies and requirements, and proposed mitigation measures, the level of significance for each project-specific and cumulative impact will be specified.

5. ANIMAL LIFE

5a - 5d

The MEA provides an extensive list of common bird and mammal species found in the Napa Valley and the Calistoga area. Two endangered species have been sited in the Calistoga area. They are the peregrine falcon (Falco peregrinus anatum) and the prairie falcon (Falco Mexicanus). Both species are listed as "endangered" by the state of California. The peregrine falcon is listed as endangered by federal agencies as well.

Build-out of proposed General Plan land uses may change the diversity or the number of animal species. Land development may reduce animal habitat and reduce the numbers of unique, rare, or endangered animal species.

Additional population in the City may indirectly result in the addition of domestic animal species. Land development that reduces animal habitat may result in a barrier to the migration or movement of animals.

Siltation associated with construction activities may affect water quality. Existing fish and wildlife habitat may be deteriorated.

EIR Study Methodology

Animal life will be analyzed in the Biology section of the EIR. The following methodology will be used:

1. The MEA and any other existing documentation will be used to describe existing conditions and analyze the impacts of proposed land uses upon known locations of rare or endangered animal species. An estimate will be made of the amount of habitat that will be reduced.
2. All potential project-specific or cumulative biology impacts will be defined.
3. Existing and proposed City Policies and Requirements related to the defined impacts will be indicated.
4. Mitigation measures will be developed as necessary for any impacts.
5. Based upon existing City policies, proposed General Plan policies and requirements, and proposed mitigation measures, the level of significance after mitigation for each project-specific and cumulative impact will be specified.

6. NOISE

6a - 6b

Build-out of residential, commercial, and industrial uses will generate additional traffic. This will increase existing noise levels and may affect sensitive noise receptors such as residences or hospitals. These increases in noise levels may expose people to severe noise levels.

EIR Study Methodology

A noise analysis will be prepared by Sound Solutions. It will be summarized for inclusion in the EIR. The following methodology will be used:

1. The existing and future noise environment will be described and quantified for the following potential noise sources: roadways, the Calistoga Soaring Center, Sprint Car Races at the Napa County Fairgrounds, wind machines, and other noise sources.
2. Impacts to sensitive noise receptors will be addressed.
3. All potential project-specific or cumulative noise impacts will be defined.
4. Existing and proposed City Policies and Requirements related to the defined impacts will be indicated.
5. Mitigation measures will be developed as necessary for any impacts.
6. Based upon existing City policies, proposed General Plan policies and requirements, and proposed mitigation measures, the level of significance for each project-specific and cumulative impact will be specified.

7. LIGHT AND GLARE

Development of proposed General Plan land uses may produce new light or glare. Additional street lights in currently undeveloped areas of the City may create additional light and disturb existing residents. New buildings may create glare depending on the construction materials used.

Future projects proposed under the General Plan will be required to meet the following mitigation measure to reduce any impact.

- M. M. 1. All projects proposed under the General Plan shall be assessed by the City for potential light and glare impacts.

In accordance with the tiering process, light and glare will not be addressed in the revised General Plan Update EIR. Light and glare impacts will be addressed in site-specific environmental analyses.

8. LAND USE

The proposed adoption of the General Plan will substantially alter present and planned land uses of the Study Area. Some urban uses will replace vacant lands. Some parcels may be redeveloped with higher intensity uses. Some areas will be preserved with open space uses. Previously unplanned road extensions are being considered with the proposed General Plan. In addition, there are new policies proposed in the Land Use, Circulation, Housing, Open Space, Conservation, Geothermal, Safety and Noise Elements.

EIR Study Methodology

Land use impacts related to existing uses as well as to land use plans will be analyzed according to the following methodology:

1. The relationship of the proposed project to all applicable City Plans and Policies will be discussed.
2. The analysis will include a discussion of the general land use patterns citywide and regionally. The cumulative effects of existing uses, approved projects, major buildings under construction, planned projects with formal application, known projects and the proposed project will be evaluated.
3. The effect of the proposed project on other land uses in specific areas of the community will be addressed. The overall effect of the proposed project on the general city character will be evaluated. The change in land use patterns and potential impacts associated with the proposed general plan land uses will be assessed.
4. All potential cumulative land use impacts will be defined.
5. Existing City policies and requirements related to the defined land use impacts will be stated.
6. Mitigation measures proposed for any land use impacts will be indicated.
7. Based upon existing City policies and requirements and proposed mitigation, the level of significance for each project-specific and cumulative impact will be specified.

9. NATURAL RESOURCES

Construction associated with the proposed General Plan land uses may require the use of fossil fuels, sand gravel, asphalt, lumber as well as other natural resources.

Establishment of proposed uses is not anticipated to increase the rate of use of any natural resource.

10. RISK OF UPSET

10a - 10b

Proposed land uses, especially commercial, may result in the risk of explosion or the release of hazardous substances. In June 1989, four sites were identified in Calistoga as having hazardous wastes or substances. Each site has been investigated by the Water Resources Board or has been the subject of a City initiated study. No water wells investigated contained contaminants in excess of their state action levels. (City of Calistoga General Plan Update Volume I: MEA and Issues and Options).

It is not anticipated that proposed General Plan uses will interfere with an emergency response plan or an emergency evacuation plan. Under Goal F of the Safety Element, the City has designated Foothill/SR 128 and Lincoln as emergency evacuation routes.

Future projects involving any risk of upset will require discretionary approvals and may fall under conditions and requirements imposed in the Napa County Hazardous Materials Emergency Response Plan. Implementation 1 under Goal E of the Safety Element provides that the City ". . . will coordinate with the County Office of Emergency Services to facilitate implementation of the Napa County Hazardous Materials Emergency Response Plan and will review new development proposals for their potential to generate hazardous wastes." In addition, any proposals involving any Risk of Upset shall comply with the following mitigation:

- M. M. 2. The City shall require a Risk of Upset analysis for any proposal which may potentially result in the risk of explosion or the release of hazardous substances.

In accordance with the tiering process, risk of upset will not be addressed in the General Plan Update EIR. These impacts will be addressed in site-specific environmental analysis.

11. POPULATION

The proposed General Plan land uses will alter the location, distribution, and density of the population in the Study Area. It will alter the population growth rate in certain portions in the City.

EIR Study Methodology

Population impacts of the proposed General Plan will be analyzed in the EIR. The following methodology will be used:

1. The demographic characteristics of the area in terms of total population, employment by industry, and employment locations will be discussed.
2. All potential project specific and/or cumulative impacts related to future population impacts will be stated.
3. Existing City policies and requirements related to the defined population impacts will be stated.
4. Mitigation measures proposed for any population impacts will be indicated.
5. Based upon existing City policies and requirements and proposed mitigation, the level of significance for each project-specific and cumulative housing impact will be defined.

12. HOUSING

The proposed General Plan will affect existing housing. It will provide for additional housing. Proposed commercial and industrial uses may create a demand for additional housing.

EIR Study Methodology

Housing impacts of the proposed General Plan will be analyzed in the EIR. The following methodology will be used:

1. A description of the existing housing stock and household characteristics will be prepared.
2. Impacts of proposed land use categories on housing availability will be analyzed.
3. All potential project-specific and/or cumulative housing impacts will be defined.
4. Existing City policies and proposed City policies and requirements will be stated.

5. Mitigation measures for any housing impacts will be developed.
6. Based upon existing and proposed City policies and requirements and proposed mitigation, the level of significance for each project-specific and cumulative housing impacts will be defined.

13. TRANSPORTATION/CIRCULATION

13a - 13f

Proposed General Plan land uses will generate substantial additional vehicular movement, alter present patterns of circulation, and have a substantial impact upon existing transportation systems. Additional vehicles will create a demand for new parking facilities. With the possible extension of the Napa Valley Wine Train, and potential increased demand upon the Soaring Center, alterations to rail or air traffic may occur. Increases in vehicles may increase traffic hazards to other vehicles, bicyclists or pedestrians.

EIR Study Methodology

A traffic analysis will be prepared by Allan G. Tilton, P.E., and summarized for inclusion in the EIR. The following methodology will be used:

1. The existing setting will be described in terms of the following: streets and roadways, arterial and collector streets, and current traffic volumes.
2. Projected traffic volumes related to the proposed General Plan build-out will be calculated.
3. The existing and projected level of service for streets will be addressed. In addition signalized and unsignalized intersections will be included in the level of service analysis.
4. Proposed bicycle and pedestrian facilities will be described and analyzed.
5. Efforts to expand the Napa Valley Wine Train and/or any potential increase in air traffic demand will be described and analyzed.
6. All potential project-specific or cumulative impacts will be defined.
7. Existing and proposed City Policies and Requirements related to the defined impacts will be indicated.
8. Mitigation measures will be developed as necessary for any impacts.

9. Based upon existing City policies, proposed General Plan policies and requirements, and proposed mitigation measures, the level of significance for each project-specific and cumulative impact will be specified.

14. PUBLIC SERVICES

14a - 14f

The proposed General Plan will affect and/or result in the need for new or altered governmental services in the following areas: fire protection, police protection, park and other recreational facilities, and maintenance of public facilities. The addition of population may affect school services and other governmental services.

EIR Study Methodology

A Public Services/Utilities section will be prepared for the EIR. The following methodology will be used:

Services/Utilities Summary

1. We will contact all public service agencies and utilities providing service to the Study Area. Special attention will be paid to the ability of each agency to serve the planning area.

We will, at a minimum, contact the following:

- Fire
- Police
- Parks and Recreation
- Public Works
- Solid Waste
- Medical
- Other Governmental Services

2. Each public service will be analyzed individually for existing conditions.
3. The location of existing facilities and their capacity to serve the proposed study area will be discussed.
4. Where applicable, generation factors will be provided.

5. We will define all potential project specific and/or cumulative impacts for each service or utility.
6. Existing City and proposed General Plan policies and requirements related to the defined impacts will be stated.
7. Mitigation measures proposed for any impacts will be indicated.
8. Based upon existing City and proposed General Plan policies and requirements and proposed mitigation, the level of significance for each project specific and cumulative public service and utility impact will be specified.

15. ENERGY

15a - 15b

Fuel and energy will be required for construction and operation of proposed land uses. Amounts required for buildout are not anticipated to be great. Gas, electricity, and other sources of power will be addressed in the Public Services and Utilities section of the EIR as described below.

The proposal would not result in substantial increases in demand upon existing sources of energy. It would not require the development of new sources of energy. The creation of a geothermal heating district is currently under study (Calistoga General Plan Update Volume I: MEA and Issues and Options).

16. UTILITIES

16a - 16f

The proposed General Plan Update will result in a need for new systems or substantial alterations to the following utilities: water, sewer, or storm drainage. It may result in substantial alterations to telephone, gas, or electricity utilities.

EIR Study Methodology

A Public Services/Utilities section will be prepared for the EIR. The following methodology will be used:

1. We will contact all public service agencies and utilities providing service to the Study Area. Special attention will be paid to the ability of each agency to serve the planning area.

We will, at a minimum, contact the following:

- Wastewater
 - Water
 - Storm Drains
 - Telephone
 - Natural Gas
 - Electricity
2. Each public service will be analyzed individually for existing conditions.
 3. The location of existing facilities and their capacity to serve the proposed study area will be discussed.
 4. Where applicable, generation factors will be provided.
 5. We will define all potential project specific and/or cumulative impacts for each service or utility.
 6. Existing City and proposed General Plan policies and requirements related to the defined impacts will be stated.
 7. Mitigation measures proposed for any impacts will be indicated.
 8. Based upon existing City and proposed General Plan policies and requirements and proposed mitigation, the level of significance for each project specific and cumulative public service and utility impact will be specified.

17. HUMAN HEALTH

17a - 17b

Implementation of the proposed General Plan Update may create potential health hazards as described under Risk of Upset above. Persons may be exposed to these hazards. Mitigation measures and programs have been provided under soils, water and risk of upset which will mitigate human health impacts.

18. AESTHETICS

The buildout of the proposed General Plan may result in the obstruction of any scenic vista or view open to the public. Uses developed under the plan may create an aesthetically offensive site in the opinion of the public.

Future projects proposed under the General Plan shall be subject to the following Open Space Element Implementation Programs to reduce aesthetic impacts:

- B. I. 1. In conjunction with site plan review or use permit approval the City will require a detailed grading and landscaping plan for new developments. The plan shall be reviewed by the Planning Department for its treatment of hillsides, forest lands, sensitive areas, viewsheds, and other aesthetic features.
- B. I. 3. The City will develop measures in the Zoning Code for the protection of view corridors, unique landforms, scenic highways and buffers between neighborhoods. This shall include establishment of a scenic highway overlay district along Silverado Trail and Lake County Highway.

In accordance with the tiering process, aesthetic impacts will not be addressed in the General Plan Update EIR. These impacts will be addressed in site-specific environmental analysis.

19. RECREATION

Establishment of the proposed land use plan and Open Space and Conservation Elements will increase the quantity of existing recreational opportunities. It would improve the quality of existing recreational opportunities.

20. CULTURAL RESOURCES

20a - 20d

According to the MEA, there are several prehistoric and historic sites and structures within the planning area. Overall, less than 15% of the Study Area has been studied for the presence of cultural resources. There is a high probability of additional prehistoric cultural resources in certain areas of the City as described in the MEA. Grading as well as other construction activities may affect prehistoric or historic sites, unique ethnic cultural values, or restrict existing religious or sacred uses within the City area.

The following Conservation Element Implementation Programs shall apply to all development projects proposed under the General Plan:

- D. I. 1. The City will assist property owners in their restoration efforts. This includes providing information on preservation resources and assisting in the placement of structures on the National Register of Historic Places.
- D. I. 2. The City will regulate changes in the exteriors of structures identified in the Napa County Historic Resources Inventory, Cities of Calistoga and Yountville Volume, and in the California Archaeological Inventory as well as any future historic assessments. This can be accomplished through design review to enhance the value of Calistoga's heritage.
- D. I. 3. The City will seek private and public funding for historic preservation.
- D. I. 4. The State Historic Building Code will be used at the Building's Official's discretion on any structure identified in the Napa County Historic Resources Inventory, Cities of Calistoga and Yountville Volume, and in the California Archaeological Inventory as well as any future historic assessments.
- D. I. 5. Prior to ground disturbances, the City will investigate the presence of archaeological artifacts.

In accordance with the tiering process, cultural resources impacts will not be addressed in the General Plan Update EIR. These impacts will be addressed in site-specific environmental analysis.

21. MANDATORY FINDINGS OF SIGNIFICANCE

21a - 21d

The project has the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, threaten plant and animal communities, reduce the number or restrict the range of rare or endangered plant and animal species, and eliminate important examples of major periods in California history and prehistory. The project may have the potential to achieve short-term to the disadvantage of long-term environmental goals. The project has impacts which are individually limited, but cumulatively considerable. The project may cause substantial adverse indirect or direct impacts on human beings.

ATTACHMENT B

CITY OF CALISTOGA GENERAL PLAN UPDATE INITIAL STUDY CONCLUSIONS

INTRODUCTION

The City of Calistoga is considering the approval of a comprehensive General Plan Update to their currently adopted 1977 General Plan. The proposed actions constitute a project under the California Environmental Quality Act (CEQA) Guidelines; therefore, the City will prepare a Program Environmental Impact Report (EIR). The EIR will identify significant project-specific effects, for the environmental topics described in the Initial Study, which may occur as a result of the project or on a cumulative basis in conjunction with other past, present, and reasonably foreseeable projects. Based upon the Initial Study, the following preliminary impact conclusions have been established.

CONCLUSIONS

Significant Environmental Effects Which Cannot Be Avoided If The Project Is Implemented - Program EIR

Several significant unavoidable adverse impacts are identified in the Initial Study and will require mitigation measures to be addressed in the Program EIR. The impacts that were identified in the Initial Study as significant or potentially significant that will be addressed in the Program EIR are as follows:

2. Air

- a. Development of the proposed land uses and circulation system may create substantial air emissions. Additional stationary and mobile pollutant sources will increase local emissions.
- b. Proposed light industrial uses may create objectionable odors.

4. Plant Life

- a. The proposed General Plan uses and policies may change the diversity of plant species or the number of species.
- b. Proposed land development and/or geothermal development may impact native habitats and rare or endangered species.

- c. Landscaping associated with new development may introduce new species of plants into the Study Area.
- d. Build-out of proposed General Plan land uses will reduce existing agricultural production within the City.

5. Animal Life

- a. Build-out of proposed General Plan land uses may change the diversity or the number of animal species.
- b. Land development may reduce animal habitat and reduce the number of unique, rare, or endangered animal species.
- c. Additional population in the city may indirectly result in the addition of domestic animal species. Land development that reduces animal habitat may result in a barrier to the migration or movement of animals.
- d. Siltation associated with construction activities may affect water quality. Existing fish and wildlife habitat may be deteriorated.

6. Noise

- a. Additional traffic will increase existing noise levels and may affect sensitive noise receptors such as residences or hospitals.
- b. Increases in noise levels may expose people to severe noise levels.

8. Land Use

The proposed adoption of the General Plan will substantially alter present and planned land uses of the Study Area.

11. Population

The proposed General Plan land uses will alter the location, distribution, and density of the population in the Study Area. It will alter the population growth rate in certain portions of the City.

12. Housing

The proposal will affect existing housing and create a demand for additional housing.

13. Transportation/Circulation

- a. Proposed General Plan land uses will generate substantial additional vehicular movement.
- b. Additional vehicles will create a demand for new parking facilities.
- c. Proposed General Plan land uses will have a substantial impact upon existing transportation systems.
- d. Proposed General Plan land uses will alter present patterns of circulation.
- e. With the possible extension of the Napa Valley Wine Train, and potential increased demand upon the Soaring Center, alterations to rail or air traffic may occur.
- f. Increases in vehicles may increase traffic hazards to other vehicles, bicyclists or pedestrians.

14. Public Services

- a. The proposed General Plan will affect and/or result in the need for new or altered governmental services in the area of fire protection.
- b. The proposed General Plan will affect and/or result in the need for new or altered governmental services in the area of police protection.
- c. The proposed General Plan may affect and/or result in the need for new or altered governmental services in the area of school services.
- d. The proposed General Plan will affect and/or result in the need for new or altered governmental services in the area of parks or other recreational facilities.
- e. The proposed General Plan will affect and/or result in the need for new or altered governmental services in the area of maintenance of public facilities.
- f. The proposed General Plan may affect and/or result in the need for new or altered governmental services in the area of other governmental services.

15. Energy

- a. Some fuel and energy will be required for construction and operation of proposed lands uses. Gas, electricity, and other sources of power will be addressed in the Public Services and Utilities section of the Program EIR.

16. Utilities

- a. The proposed General Plan will result in a need for new systems or substantial alterations to water systems.
- b. The proposed General Plan will result in a need for new systems or substantial alterations to sewer systems.
- c. The proposed General Plan will result in a need for new systems or substantial alterations to storm drain systems.

21. Mandatory Findings of Significance

- a. The project has the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, threaten plant and animal communities, reduce the number or restrict the range of rare or endangered plant and animal species, and eliminate important examples of major periods in California history and prehistory.
- b. The project may have the potential to achieve short-term to the disadvantage of long-term environmental goals.
- c. The project has impact which are individually limited, but cumulatively considerable.
- d. The project may cause substantial adverse indirect or direct impacts on human beings.

Significant Environmental Effects Which Cannot Be Avoided If The Project Is Implemented - Subsequent EIRs

Several significant unavoidable adverse impacts are identified in the Initial Study and will require mitigation measures to be addressed in the subsequent EIRs as a part of the tiering process described in the introduction to the Initial Study. The impacts that were identified in the Initial Study as significant or potentially significant that will be addressed in the subsequent EIRs are as follows:

1. Earth

- a. Development of proposed General Plan uses may result in unstable earth conditions or changes in geologic substructures.
- b. Development of proposed land uses will disrupt, displace, compact or cause overcovering of soils.
- c. Grading may change existing topography or ground surface relief features.
- d. Grading may modify unique geologic or physical features.
- e. construction of proposed land uses may increase soil erosion by earthwork and other construction activities.
- f. Construction activities may result in siltation impacts to creeks and waterways.
- g. The development of additional residential and employee generating uses would expose persons as well as property to geologic hazards noted above.

3. Water

- b. Increased development will increase the amount of impervious surfaces changing absorption rates and drainage patterns.
- c. Some development is proposed in the 100-year and 500-year flood boundaries as described in the MEA. This may alter the flow or course of flood water.
- d. Increased run-off may increase surface water flow.
- e. Erosion from construction activities may increase siltation in creeks and waterways. The increased siltation may alter surface water quality.
- f. Additional development may require the use of well water from the Fiege well field. This may alter the rate of flow of ground water.
- g. Use of well water, and mineral water from aquifers by proposed residential, commercial and industrial activities may result in increased withdrawals of ground water.
- h. Substantial reduction in the amount of water otherwise available for public water supplies.
- i. Proposed land uses in the 100-year and 500-year flood-plain boundaries may alter the flow or course of flood water and expose persons or property to flooding.

7. Light and Glare

Development of proposed General Plan land uses may produce new light or glare.

10. Risk of Upset

- a. Proposed land uses, especially commercial, may result in the risk of explosion or the release of hazardous substances.

17. Human Health

- a. Implementation of the proposed General Plan Update may create potential health hazards as described in Risk of Upset.
- b. Persons may be exposed to these hazards.

18. Aesthetics

The buildout of the proposed General Plan may result in the obstruction of any scenic vista or view open to the public. Uses developed under the plan may create an aesthetically offensive site in the opinion of the public.

20. Cultural Resources

- a. The proposal may alter or destruct a prehistoric or historic archaeological site.
- b. The proposal may result in adverse physical or aesthetic effects of a prehistoric or historic building, structure, or object.
- c. The proposal may have the potential to cause a physical change which would affect unique cultural values.
- d. The proposal may restrict existing religious or sacred uses within the potential impact area.

Environmental Effects Determined To Be Mitigated To A Level Of Insignificance

No impacts requiring mitigation described in the Initial Study have been mitigated to a level of insignificance.

Environmental Effects Determined To Be Insignificant

Several insignificant impacts were identified in the Initial Study and will not require any form of mitigation. The impacts found to be insignificant are identified below. Supporting evidence explaining why the impacts are found to be insignificant is provided in Attachment A - Initial Study Checklist Responses.

2. Air

- c. The development proposed under the General Plan is not anticipated to have a significant effect upon air movement, moisture or temperature, or result in any change in climate locally or regionally.

3. Water

- a. Implementation of General Plan components is not anticipated to change any fresh surface water currents or the course of direction or water movements.

9. Natural Resources

Establishment of proposed uses is not anticipated to increase the rate of use of any natural resource.

10. Risk of Upset

- b. It is not anticipated that proposed General Plan uses will interfere with an emergency response plan or emergency evacuation plan.

15. Energy

- b. The proposal would not result in substantial increases in demand upon existing sources of energy. It would not require the development of new sources of energy.

19. Recreation

Establishment of the proposed land use plan and Open Space and Conservation Elements will increase the quantity and improve the quality of existing recreational opportunities.

ATTACHMENT C ALTERNATIVES

NO PROJECT

- **No Development** - Under the No Development Alternative the City would not implement either the existing or proposed General Plan. No further development would occur in the City. Traffic, land use, water supply, and other environmental topics would remain in the same condition as they presently exist.
- **Development of the Existing General Plan** - This alternative assumes development according to the existing General Plan adopted on March 15, 1977. Implementation of this alternative assumes a buildout population of approximately 7, 108.
- **Alternative Location** - This alternative proposes the development of the General Plan Update uses at another location. CEQA requires that an alternative location for a proposed project be analyzed if one is available. The EIR will discuss the feasibility of this alternative to meet project objectives and state requirements.

LOW INTENSITY

The Low Intensity Alternative assumes an emphasis of development of Rural Residential uses. This alternative assumes a buildout population of approximately 6,308.

HIGH INTENSITY

The High Intensity Alternative assumes an emphasis of Low Density residential uses. This alternative assumes a buildout population of approximately 9,231.



NAPA COUNTY

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

TRENT CAVE, R.S.
Director of Environmental Management

HAZARDOUS MATERIAL SECTION
625 IMPERIAL WAY, SUITE #9 • NAPA, CALIFORNIA 94559-1329
AREA CODE 707/253-4269 ATSS #528-4269
FAX 707/253-4176

Feb. 6, 1990

Richard Spitler, Planning Director
City of Calistoga
1232 Washington St.
Calistoga, CA 94515

SUBJECT: Draft General Plan Update for the City of Calistoga

On Page 161 of the above document, you list three sites which are contaminated according to the State Office of Permit Assistance within the City. I offer the following information for your consideration. As of January 31, 1990, we have 9 contaminated sites listed in our files within the City.

They include two of the three sites listed by the State Office of Permit Assistance and the added City Hall parking lot site which you identified. Our records indicate that the Department of Transportation site at 1413 Tubbs Lane is not within the City. I have enclosed a copy of our list with an indication of the source and contaminate where known. Page 164, Finding 7 should be changed to reflect these additional sites.

The reference to the Napa County Hazardous Management Waste Plan 1988, should be changed to the "Draft Napa County Hazardous Waste Management Plan, March 1988" since a final plan has not been circulated or approved.

If you have any questions regarding these comments, please call me.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Ralph Hunter".

RALPH HUNTER
Environmental Management Manager

RH:ml

✓ cc: Jim Pahl, Senior Environmental Health Specialist

LIST OF CONTAMINATED SITES WITHIN
CITY OF CALISTOGA
AS OF JANUARY 31, 1990

<u>Haz Fac #</u>	<u>UST #</u>	<u>SITE</u>
	0393	Merchant Property 1506 Lincoln Ave., Calistoga Problem: Tank leaks Material: Aviation fuel Calistoga Mineral Water 504 Washington St., Calistoga Problem: Spill Material: Diesel
68		Chevron 1107 Foothill Blvd., Calistoga Problem: Tank leak Material: Gasoline
18		Calistoga Auto Body 1020B Foothill Blvd., Calistoga Problem: Unknown Material: Unknown
119		Proposed Police Facility 1232 Washington St., Calistoga Problem: Probable Tank leak Material: Petroleum Hydrocarbons
	0023	Bohan's Shell 1108 Lincoln Ave., Calistoga Problem: Tank Leak Material: Waste oil
	0229	Food & Liquor Store #168 940 Petrified Forest Rd., Calistoga Problem: Tank leak Material: Gasoline
	0033	Calistoga High School 1608 Lake St., Calistoga Problem: Tank leak Material: Diesel fuel
178		Calistoga Soaring Center 1546 Lincoln Ave., Calistoga Problem: Tank leak Material: Aviation fuel

DEPARTMENT OF TRANSPORTATION

BOX 7310

SAN FRANCISCO, CA 94120

415 923-4444



July 9, 1990

[Handwritten signature]
JUL 10 1990
LOCATION NO.: NAP 29 CALISTOGA
SCH. NO.: 90030423
FILE NO.: NAP000016

Richard Spitler
City of Calistoga
1232 Washington Street
Calistoga, CA 94515

RE: NOTICE OF PREPARATION FOR THE CITY OF CALISTOGA'S GENERAL PLAN
UPDATE

Dear Mr. Spitler:

Thank you for including the California State Department of Transportation (Caltrans) early in the review process for the Calistoga General Plan Update. We have previously reviewed the Master Environmental Assessment and Issues & Options (Volume I), and the Traffic Analysis and Circulation System and Assessment. A copy of our February 27, 1990 letter is provided for your information. Comments on the May 1990 Traffic Analysis Land-Use Options Assessment are as follows:

- 1) The street names should be noted on Figure 2 Page 6. The date of the existing traffic volumes should be identified.
- 2) The relevance of the discussion of the Environmental Capacity of streets on page 11 and 12 is unclear.
- 3) Calculations for the Level of Service on Tables 3A and 3B should be provided. Diagrams of turn movement counts should also be provided.
- 4) Additional information on the input and results of the traffic model should be provided. Specifically, what type of model was used? The existing Sub-Regional land use data should be shown on Table 4. Additional links on page 8 should be provided to show traffic on Route 128 at Tubbs Lane, Route 29 at Dunaweal Lane, and Route 29 at Greenwood Avenue.
- 5) The recommended mitigation measures discussed on page 25 are inconsistent with Figure 8 which shows proposed signals on Route 29 at Sparrow Street and at Fairway Extension.

July 9, 1990

- 6) The operational improvements discussed on page 26 are vague. The bike lanes and truck diversion route are not shown. The City should seriously consider prohibiting street parking along Route 29 in the downtown area.
- 7) Cost of improvements shown on Table 10 and 11 do not reflect the proposed signals on Route 29 at Sparrow Street and Fairway Extension.
- 8) The proposed traffic signals on Route 29 and 128 must meet Caltrans design standards and signal warrant criteria in the Highway Design Manual. The existing signal on Route 29 at Washington Street should be studied to see if it needs to be modified for the projected traffic volumes.
- 9) Caltrans does not oppose the realignment of Silverado Trail at Route 29. However, State funds are not available for this project. A Project Scope Summary Report is being prepared for a rehabilitation project on Route 29 between Wapoo Avenue and the Lake County Line. It is anticipated that this project will be constructed in 1993.
- 10) Any widening or channelization proposed on Route 29 or 128 should be studied by Caltrans for justification as safety improvements before they can be included in the STIP.
- 11) Table 9 showing the projected parking demand is missing.
- 12) Any proposed access connections to or work performed within the State right of way will require an Encroachment Permit. A completed application, environmental documentation and five (5) sets of plans should be submitted to the following address:

Permit Engineer
P. O. Box 7310
San Francisco, CA 94120
(415) 557-1984

Spitler/Napa000016

Page 3

July 9, 1990

We appreciate the opportunity to work with you on this General Plan Update Traffic Analysis and wish to continue close coordination on its development. Please forward two copies of the Draft EIR and the Traffic Analysis for the General Plan to the following address:

Gary F. Adams
District ATSD Coordinator
Caltrans District 4
P. O. Box 7310
San Francisco, CA 94120

Should you have any questions on these comments, please contact Terry L. Barrie of my staff at (415) 557-7135.

Sincerely yours,

PRESTON W. KELLEY
District Director

By

Gary Adams FOR:

GARY F. ADAMS
District ATSD Coordinator

TLB:lt

cc: Nancy Mitchell, State Clearing House
Susan Pultz, MTC
Sally Germain, ABAG
Wade Greene, District CEQA Coordinator

DEPARTMENT OF TRANSPORTATION

BOX 7310
SAN FRANCISCO, CA 94120
(415) 923-4444

LOCATION: NAP-29-CALISTOGA

SCH NO.: NONE

FILE NO: NAP000016

February 27, 1990

Jo Noble
City of Calistoga
1232 Washington Street
Calistoga, California 94515

Re: City of Calistoga General Plan Update - Traffic Analysis and
Circulation Assessment.

Dear Ms. Noble;

Thank you for including the California State Department of Transportation (Caltrans) in the early stages of the environmental review process. We have reviewed the above-referenced Circulation Assessment and forward the following comments:

- 1) It would be helpful if Cedar Street were labeled on the network on page 6.
- 2) Page 9 of the text indicates the peak hour in Calistoga to be both mid-day and PM, although the analysis addresses only AM & PM volumes. Please indicate how the analysis of the mid-day peak is accounted for within this study.
- 3) The 24-hour and peak hour volumes shown in table 1, page 11 have a wide variance from those shown in the 1987 Traffic Volumes on California State Highways, which is listed as reference #4 on page 60. (Note that the 1988 count book is the most current.) This variance should be explained. Existing traffic needs to be validated, as these numbers are the basis of all transportation modeling projections and analysis of operational and signal warrant criteria. Please indicate which modeling program was used for this analysis.
- 4) The 3rd paragraph on page 17 should follow the last paragraph referring to unsignalized intersections.
- 5) On page 19, on the next to last line, change "miles" to "rules".
- 6) Is Table 6 on page 21 referring to "No Passing" ?
- 7) On page 22, the PEAK HOUR ANALYSIS paragraph refers only to AM and PM peak hours. Please explain the mid-day peak reference on page 9.
- 8) Page 31, B.2. refers to considering the diversion of truck traffic from the downtown core (Lincoln St/Rte. 29). Caltrans will be interested in the development of this discussion if it proceeds to a further level of analysis.
- 9) On page 31 change "Figure 12" to "Figure 11".
- 10) Table 11 on page 43 should reiterate that GP BUILDOUT is year 2000.

COMMENTS cont:

- 11) Appendix A, page 1 cites the 3rd (1983) edition, of the Institute of Transportation Engineers trip generation manual, while reference A5 cites the latest 4th (1987) edition.
- 12) The validity of the signal warrants on State Routes 29 and 128 will have to be verified by our Office of Traffic Operations.
- 13) Any proposed widening or channelization at intersections on State Routes 29 or 128 should be justified as safety improvements before they can be included in the State Transportation Improvement Program.
- 14) Our Project Development Branch has no comments at this time on the proposed street connections to State Routes 29 and 128. They will wait until more details of the locations and prioritization become available.
- 15) Any proposed access connections to or work performed within the State Highway right-of-way must conform to standards set forth in the Caltrans Highway Design Manual and an encroachment permit must be obtained for such work. A completed application, environmental documentation, and five (5) sets of plans should be submitted to the following address:

Permit Engineer
P.O. Box 7310
San Francisco, Calif. 94120
(415) 557-1984

We appreciate the opportunity to work with you on this General Plan Update - Circulation Assessment and wish to continue close correspondence on its development. Should you have any questions regarding this comment, please contact Kit Curtiss of my staff at (415) 557-2495.

Sincerely yours,

BURCH C. BACHTOLD
District Director

by



WADE GREENE
District CEQA Coordinator

cc: Loreen McMahon, State Clearinghouse
Susan Pultz, MTC
Sally Germain, ABAG

bcc: George Gray/Brad McAllester
S Randolph/B Couchman
Shein Lin, Project Development N
Bob Nijjar, Traffic
Ed Cole, Trans Studies



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

ALAMEDA COUNTY
Edward R. Campbell
Shirley J. Campbell
(Chairperson)
Chuck Corica
Frank H. Ogawa

CONTRA COSTA COUNTY
Paul L. Cooper
(Secretary)
Sunne Wright McPeak
Tom Powers

MARIN COUNTY
Al Aramburu

NAPA COUNTY
Bob White

SAN FRANCISCO COUNTY
Harry G. Britt
Jim Gonzalez

SAN MATEO COUNTY
Gus J. Nicolopoulos
Anna Eshoo

SANTA CLARA COUNTY
Martha Clevenger
Rod Diridon
Roberta H. Hughan
Susanne Wilson

SOLANO COUNTY
Osby Davis
(Vice Chairperson)

SONOMA COUNTY
Jim Harberson
Patricia Hilligoss

June 28, 1990

JUN 29 1990

City of Calistoga
1232 Washington Street
Calistoga, CA 94515

Attention: Richard Spitler

Dear Mr. Spitler:

We have received the Notice of Preparation of a Draft Environmental Impact Report (DEIR) for the Calistoga General Plan Update. We have the following comments on the scope and content of the environmental document.

BAAQMD Board Resolution #1666 urges all Bay Area cities and counties to adopt an air quality element, or section of another element, in their local general plan. We strongly believe that addressing air quality early in the planning process allows more innovative and comprehensive solutions to air quality problems than does case-by-case environmental review of development proposals. Even in smaller cities, air quality warrants attention at the general plan level. Local land use decisions can affect regional commute patterns and access to services. Motor vehicle trips to work and to services affect air quality. We strongly recommend that the City include an air quality element or section in the General Plan Update.

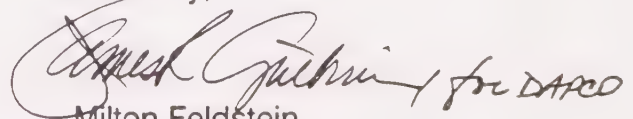
We also recommend that the DEIR for the General Plan Update include an air quality impact analysis and commitment to appropriate mitigation measures if air quality problems are indicated. Analysis should take into account impacts of development under the proposed Plan and, where relevant, cumulative impacts of all predictable development in the vicinity of the Plan Area. At a minimum, the analysis should include the following elements:

1. Evaluate whether existing sources of criteria air pollutants, odorous compounds, or toxic air contaminants, if any, located in the Plan Area and its vicinity could cause health or nuisance problems for future residents and employees. Particular attention should be paid to sensitive receptors such as schools, hospitals, and senior citizen facilities.

2. Estimate emissions of criteria air pollutants and toxic air contaminants from industrial facilities and other potential stationary sources of air pollutants expected to locate in the Plan Area. Where specific uses are not yet known, initial estimates of emissions should be made based on the most probable uses.
3. Estimate the anticipated increase in emissions of ozone precursors (nitrogen oxides and volatile organic compounds) and fine particulate matter (PM₁₀) due to increased traffic in the Plan Area.
4. Calculate worst-case carbon monoxide (CO) concentrations at the most congested or heavily traveled intersections in the Plan Area.
5. Assess the significance of the impacts identified in the analysis outlined above and identify appropriate mitigation measures and alternatives. For impacts due to traffic associated with development under the Plan, trip-reduction measures, such as programs to encourage ridesharing, transit use, and bicycling, should be considered in conjunction with roadway improvements. (BAAQMD Board Resolution #1716 endorses Contra Costa County's Transportation Systems Management ordinance because it explicitly favors trip-reduction measures.) In addition to identifying mitigations and alternatives, the DEIR should evaluate their effectiveness in reducing impacts and indicate who is responsible for implementing each mitigation measure.

The BAAQMD publication AIR QUALITY AND URBAN DEVELOPMENT - GUIDELINES FOR ASSESSING IMPACTS OF PROJECTS AND PLANS (1985) provides guidance in conducting the air quality impact analysis outlined above. Also, our Planning Division staff is available to assist you with the impact analysis or the preparation of an air quality element. If you have any questions, please contact Michael Murphy, Planner, at (415) 771-6000, extension 133.

Sincerely,

A handwritten signature in dark ink, appearing to read "Milton Feldstein", with the letters "for DAPCO" written in a smaller, less distinct script to the right of the main signature.

Milton Feldstein
Air Pollution Control Officer

MF:MM:lm

cc: BAAQMD Director Bob White

APPENDIX B
LAND USE DESIGNATIONS

PROPOSED GENERAL PLAN LAND USE DESIGNATIONS

INTRODUCTION

The Land Use Plan portrays a desired land use pattern for the time when Calistoga reaches buildout. The land use classifications described below cover both public and private development, and serve as a guide for zoning regulations and subdivision design. Table A presents a summary of density and intensity standards.

RESIDENTIAL BASE DESIGNATIONS

RR Rural Residential

This designation is applied to areas of the City located on the outer fringes of the existing service area, adjacent to County agricultural preserve areas and where steep hillsides limit development potential. Because of lack of City services and site constraints, development densities are limited. Allowable uses include single family residential, granny units, limited light agricultural uses and structures, home occupations and churches. This area serves as a buffer between the County agricultural preserve and the urban core of Calistoga. With planned capital improvements extending water and sewer services, this area can be back-filled to allow higher densities (up to 20,000 square feet per lot) to keep urban pressures off the agricultural preserve over the next twenty years and beyond.

Allowable Net Densities:

80,000 - 200,000 square feet if both on-site water and wastewater disposal.

40,000 - 80,000 square feet if either on-site water or wastewater disposal.

20,000 - 40,000 square feet if City water and wastewater services are provided.

In hillside areas, the minimum density is 40,000 square feet. The specific number of lots allowable and size of lot will be determined by application of a slope density formula.

Areas of steep slopes, unusable land, streets, floodway and park dedications are to be subtracted from the gross acreage to determine net acreage. The exceptions to this are hillside areas which are subject to the slope density formula.

(LDR) Low Density: Residential

This designation is applied to areas with both City water and sewer services and provides a transition between the outer Rural Residential areas and the more densely populated areas located closer to downtown Calistoga. Close proximity to the arteries and major collections is required. These areas are also characterized as being generally flat. Major residential subdivisions are allowed if measures are taken to ensure compatibility with adjacent rural residential uses. Allowable uses include single family residences, mobile homes, granny units, home occupations, public uses and churches.

Allowable Net Densities:

10,000 - 20,000 square feet.

Areas of steep slope, unusable land, streets, floodways and park dedications are to be subtracted from the gross acreage to determine net acreage.

(MDR) Medium Density - Residential

This designation is applied to areas with both City water and sewer services and provides for increased residential densities. They are generally located between the Low Density and High Density residential designations. It provides for major subdivision and an opportunity for single family home ownerships for low to moderate incomes. Park dedications may be required to provide active open space areas. Innovative design is encouraged to reduce "tract" effect. Deviation from traditional design standards will be allowable with a Planned Development combination designation. Allowable uses include: single family residences, duplex, triplex, granny units, mobile home parks, home occupations, bed and breakfast units, churches, and public uses.

Allowable Net Density:

6,000 - 10,000 square feet.

Areas of steep slope, unusable land, street, floodways, and park dedications are to be subtracted from this gross acreage to determine net acreage.

(HDR) High Density: Residential

This designation is applied to areas either in the town core area or where large land holdings with full City services and good street access allow for higher density development. It provides for multi-family residential uses and an opportunity for affordable housing opportunities for families and seniors with lower to moderate incomes. Building heights are limited to not exceed thirty feet. Development must be attractively landscaped and

provide off-street parking facilities without backing onto the street. Allowable uses include: Multi-family units (triplex and higher), residential care facilities, home occupations, public and quasi-public uses, and churches.

Allowable Net Densities

2,000 - 6,000 square feet per unit.

Areas of steep slope, unusable land, streets, floodways and park dedicated land are to be subtracted from this designation to determine net acreage.

RESIDENTIAL COMBINATION DESIGNATIONS

(HR) Hillside Residential

This combination designation is to be applied to Rural Residential (RR) areas where steep slopes or hillside conditions exist. As a part of the approval process detailed environmental information must be submitted including topography, preliminary grading and drainage plans, road and building plans, and tree and vegetation removal. In addition, development must adhere to strict design review guidelines to protect the viewshed.

Allowed uses include those provided for in the RR designation. However, clustering of single family uses is allowed with discretionary permit approval.

Allowable Net Density:

40,000 - 200,000 square feet. Determination of actual size and number of parcels or number of units must be subject to a slope density formula.

(PD) Planned Development

This combination designation can be applied to (LDR) Lower Density - Residential, (MDR) Medium Density - Residential, and (HDR) High Density - Residential designations located in sensitive environmental and transitional areas. It can also be applied where innovative design standards are to be applied to achieve a superior design or affordable housing.

Allowed uses include all provided for in the LDR, MDR and HDR designations.

Allowable Net Densities:

As provided for in LDR, MDR and HDR designations.

(VA) Visitor Accommodations

This combination designation is to be applied to (HDR) High Density - Residential designations where existing or adjacent motel, hotel or bed and breakfast visitor accommodations occur. Development can be allowed if determined to be compatible with adjacent residential uses.

Allowable uses include motel, hotel, inns, bed and breakfast units in addition to multi-family units (triplex and greater).

Allowable Net Density

Residential as provided in HDR; hotel/motel/inn/B&B/ one unit per 1,000 square foot net.

COMMERCIAL BASE DESIGNATIONS

(C) General Commercial

This designation is applied to all commercial areas in the downtown area and to existing neighborhood commercial centers. Access to all City services and arterial streets is required. Development must be compatible with adjacent residential uses by regulating noise and odor emissions and provision of adequate traffic control and parking. These areas must be attractively landscaped with regulated signs. Pedestrian walkways must be provided if none exist. Development is not allowed if water and sewer demand is greater than 10 acre feet per year or pollution of air or water is likely to occur. Limited residential units are allowed in the downtown area with discretionary permit review.

Allowable uses include retail, personal services, professional offices, visitor accommodations, medical offices and clinics, shopping centers, limited residential, eating establishments, bars, service stations, public agencies, public and quasi-public uses, light manufacturing service, churches, and hospitals.

Allowable Net Densities:

Lot size: minimum 6,000 square feet.

Motel, hotels, inns: one unit/1,000 square feet. Other commercial uses: floor area ratio (FAR) of .80 (total building square footage (gross floor area) divided by net land area).

(I) Light Industrial

This designation is applied to flat areas of the City where existing industrial use occurs and where it can be isolated or buffered from residential uses. All City services must be

available and access to street arterials is required or must be provided for. Regulations must be made to ensure development is done in an environmentally sensitive manner and compatible with adjacent residential and commercial uses. No uses should be permitted if adverse to noise, air, water and wastewater quality standards. No uses are allowed if it is determined that the use would have a total demand on the City water and or sewer system of 10 a.f. a year or greater.

Development must be appropriately designed, landscaped and have ample on-site parking.

Allowable uses include heavy commercial and light industrial uses, including manufacturing, auto repair, bottling plants, storage, assembly, service and repair, and greenhouses. Accessory commercial uses such as retail outlet, eating establishments, and offices are allowed with discretionary permit review or as a part of an overall industrial park plan approval.

Allowable Net Densities:

Lot size minimum: 6,000 square feet.

Floor area ratio (FAR) of .90 (total building square footage (gross floor area) divided by net land area.

A - Airport

This district limits use and development to airport and airport-related uses. Any expansion of uses or new structure must have discretionary permit approval to insure safety of the airport and long term operations. Compatibility with adjacent residential and commercial uses must be insured by examining noise concerns and design and placement of structures. Allowable uses are limited to airport and airport-related uses including: taxi service, glider operations, airplane repair and maintenance or related accessory structures and uses, such as office. Other limited accessory uses are allowed with discretionary review such as eating establishments if clearly subordinate and incidental to airport uses.

Allowable Density:

Lot size: minimum 10 acres.

Other commercial uses: floor area ratio of .10 (total building square footage (gross floor area) divided by the land area).

COMMERCIAL COMBINATION DESIGNATIONS

(VA) - Visitor Accommodations

This combination designation is to be applied to (C) Commercial designations where existing or adjacent motel, hotel or bed and breakfast visitor accommodations occur or where such developments would be beneficial. Development can be allowed in other areas if determined to be compatible with adjacent commercial and residential uses.

Allowable uses include motel, hotel, inns, bed and breakfast units in addition to the commercial and residential uses allowed in the Commercial designation.

Allowable Net Density:

Hotel/motel/inn/B&B/ one unit per 1,000 square foot net.

(DD) - Design District

This combination district can be applied to designations in commercial areas, major entrances to the City and to large land holdings with unique features. Its purpose is to require Planning Commission review of building design and property development such that development retains existing historical features of buildings and that new development is compatible with such historical structures. It also serves to ensure that major entrances to the City are attractively developed. Design guidelines should be developed to assist in making decisions.

Allowable uses include those provided for in C base district.

Allowable Net Density

Same as C base district.

PUBLIC/QUASI-PUBLIC BASE DESIGNATION

(P) Public/Quasi-Public

This designation is applied to public or private land areas currently used or planned for public uses. It provides for a wide variety of uses for the general public benefit. Because of this benefit, such designation can be applied to any area of the City, as the beneficial use dictates. However, such uses must be attractively designed and must incorporate measures to ensure compatibility with adjacent residential and commercial uses. Allowable uses include public uses such as City and County offices, corporation yards, water and wastewater facilities, parks, libraries, schools, community center, museums, fairgrounds and

quasi-public uses such as telephone and electric substations, churches, fraternal buildings and hospitals.

Allowable Net Densities:

Minimum Lot Size: 6,000 square feet

Floor area ratio (FAR) of .80 (gross floor area) divided by net land area.

PLANNED DEVELOPMENT BASE DESIGNATION

(PD) Planned Development

This designation is applied to the major entrances of the City that have significant scenic vistas and sensitive environmental features. The purpose of this designation is to provide a planned mechanism which allows large areas to be planned as a unit and allows a mixture of compatible land uses. It must be implemented by a permit process that ensures new development is creative, compatible with the environment and implements the goals and policies of the Calistoga General Plan. No development shall be allowed (with the exception of one single family home per parcel) until a Preliminary Development Plan is approved by the City Council. The permit shall require a comprehensive and detailed plan for the property that addresses issues such as the preservation of scenic vistas, open space retention, traffic and access, slope and soil stability, drainage, recreation, compatibility of land uses, employment, affordable housing needs, utilities and public facilities.

Allowable uses include those uses allowed in all of the base designations provided for in the Calistoga General Plan except Airport. This is provided that a Preliminary Development Plan receives City Council Approval, addresses the issues of concern for this designation, and is otherwise consistent with the goals and policies of the General Plan.

Allowable Net Densities:

(see the following designations for the range of allowable densities)

(RR) Rural Residential

(LDR) Low Density: Residential

(MDR) Medium Density: Residential

(HDR) High Density: Residential

(C-DD) Commercial - Design District

(I) Light Industrial

Areas of steep slopes, unusable land, streets, floodway and park dedications are to be subtracted from the gross acreage to determine net acreage. The exceptions to this are hillside areas which are subject to the slope density formula.

TABLE A
DENSITY AND INTENSITY STANDARDS

DESIGNATION	USE	MAXIMUM DENSITY/INTENSITY
Residential Base:		
RR	see text	1 unit/20,000 s.f.
LDR	see text	1 unit/10,000 s.f.
MDR	see text	1 unit/6,000 s.f.
HDR	see text	1 unit/2,000 s.f.
Residential Combining:		
HR	see text	1 unit/40,000 s.f.
PD	see LDR, MDR, HDR	see LDR, MDR, HDR
Commercial Base:		
C	motels, hotels, inns, other commercial uses	1 unit/1,000 s.f. FAR .8
I	light industrial	FAR .9
A	other airport commercial uses	FAR .1
Commercial Combining:		
VA	hotel, motel, inn, Bed and Breakfast	1 unit/1,000 s.f.
DD	see C district	same as C base district

Continued

TABLE A (Cont.)
DENSITY AND INTENSITY STANDARDS

DESIGNATION	USE	MAXIMUM DENSITY/INTENSITY
Public/Quasi Public Base:		
P	public/quasi public	FAR .8
Planned Development Base:		
PD	see text	see the following designations: RR LDR MDR HDR C-DD I

Source: City of Calistoga Planning Department

Notes: To calculate population densities, the following procedure should be used:
household size (2.1) x maximum number of future dwelling units (1,483) =
3,114.

For the development land potential analysis, please refer to the revised MEA
and Issues and Options document for assumptions and other build-out
calculations. The estimated number of future dwelling units reflects the
chosen land use plan of March 26, 1990.

APPENDIX C
TRAFFIC ASSESSMENT

**TRAFFIC ANALYSIS
LAND-USE OPTIONS ASSESSMENT
GENERAL PLAN UPDATE
CITY OF CALISTOGA, CALIFORNIA**

MARCH 1990

**prepared for
City of Calistoga**

**Prepared by
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I. INTRODUCTION

Purpose

This is the second of two reports which are part of A Traffic Impact Assessment for the City of Calistoga General Plan Update. A goal of the Options Assessment Report is to provide an evaluation of three land-use options currently being considered by the City. Alternative land use plans and transportation alternatives will provide the framework for future City policy. Issues covered in this report are:

1. Evaluate the impacts of three alternative land use scenarios on the City of Calistoga circulation network.
2. Develop improvements to correct projected future circulation needs.
3. Propose improvement standards for future development within the City of Calistoga.

II. SUMMARY OF FINDINGS

Existing Conditions

All State Highways, County roadways and City streets have two travel lanes. Traffic volumes on State Highway 29 and State Highway 128 are higher than on City streets. Within the study area there is one intersection which is currently signalized, Lincoln Avenue (State Route 29) at Washington Street.

Weekend traffic volumes are slightly higher than week day traffic volumes on major streets. Higher weekend traffic volumes on major streets are primarily due to tourist activity.

Three areas of noticeable traffic congestion are observed. The three locations are:

Traffic congestion occurs most frequently in the downtown core area on Lincoln Avenue (State Route 29) between Cedar Street and Fair Way. Congestion at this location is due in part to existing angled parking on Lincoln Avenue which reduces the effective roadway width, high pedestrian activity, and parking maneuvers.

Traffic congestion occurs at the intersection of Lincoln Avenue at Foothill Boulevard during peak periods of traffic flow. The intersection of Lincoln Avenue at Foothill Boulevard is controlled by a Four-Way STOP. High vehicle turning movement volumes, together with limited roadway width, contribute to the perception of congestion at this intersection.

Traffic congestion occurs at the intersection of Foothill Boulevard at Petrified Forest Road during periods of traffic flow. The intersection of Foothill Boulevard is controlled by a STOP sign on Petrified Forest Road. Traffic on Petrified Forest Road is required to stop while traffic on Foothill Boulevard is free flowing. High vehicle turning movement volumes, together with limited roadway width, contribute to the perception of congestion at this intersection.

All intersections within the study area are operating at acceptable levels with three exceptions. The intersection of Foothill Boulevard at Petrified Forest Road is operating at level-of-service E for left turn movements from Petrified Forest Road to Foothill Boulevard. The intersections of Lincoln Avenue at Foothill Boulevard and Lincoln Avenue at Silverado Trail are operating at level-of-service D.

Circulation Improvement Needs Alternative Plan Buildout

The following physical circulation improvements are recommended by the Consultant to address the projected future needs. Suggested improvements are listed below:

	CURRENT GP	LOW	ALTERNATIVE MIXED	HIGH
Signalization Foothill Blvd at Petrified Forest Rd.	YES	YES	YES	YES
Signalization Foothill Blvd at Lincoln Avenue.	YES	YES	YES	YES
Realignment and signalization Lincoln Avenue at Silverado Trail.	YES	YES	YES	YES
New street (Sparrow/Swallow)	YES	YES	YES	YES
New street Western Crossing	YES	YES	YES	YES
Widening Foothill Blvd	YES	YES	YES	YES#
Extend Money to Mora	YES	YES	YES	YES
New street crossing at Oak Street.	YES	YES	YES	YES
Extend Washington St to Dunaweal Lane.	YES	YES	YES	YES
Extend Cedar Street to Sparrow/Swallow Street.	YES	YES	YES	YES
Extend Fairway Drive Sparrow/Swallow Street.	YES	YES	YES	YES
Prohibit Parking on Lincoln-Add Thru lanes	No	No	No	YES#
Increase Downtown Parking Supply	YES	YES	YES	YES

Widen to 4-lanes.

III. EXISTING SETTING

Study Area

The City of Calistoga traffic study area includes the City of Calistoga together with surrounding County areas within the influence of the City of Calistoga. The City of Calistoga is situated in the northwesterly limits of the Napa Valley. To the north and south of the City of Calistoga the terrain becomes hilly and mountainous. The study area is bounded on the west by Tubbs Lane and adjacent parcels, Dunaweal Lane on the East, State Route 29 and Silverado Trail on the north, and Foothill Boulevard/State Route 128 on the south. Figure 1 shows the study area.

Streets and Roadways

The existing circulation system within the study area consists of two nearly parallel east/west roadways, Foothill Boulevard/State Route 128 and State Route 29/Silverado Trail. Principal north/south streets and roadways are Tubbs Lane, Lincoln Avenue (State Route 29) and Dunaweal Lane. A dense grid street system serves the central core area of the City. Beyond the downtown core area the street and roadway network becomes rural in character.

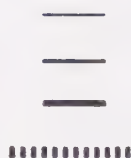
Two geographical features have influenced the development of lands and transportation systems within the study area. Land use and circulation options to the north of State Route 29/Silverado Trail and to the south of Foothill Boulevard/State Route 128 are restricted by mountainous terrain. North/south circulation has historically been restricted by the Napa River which traverses the study area from west to east. Four crossings of the Napa River are within the study area, Tubbs Lane, Berry Street, Lincoln Avenue (State Route 29) and Dunaweal Lane.

Current Traffic Volumes

Traffic volume data were compiled from data published by the California Department of Transportation, and traffic counts conducted by the consultant. Traffic volumes within the study area are summarized in Table 1. Traffic volumes on streets within the study area are shown in Figure 2.

KEY

LOCAL STREETS
COLLECTOR STREETS
ARTERIAL STREETS
STUDY AREA



City
of
Calistoga

PETRIFIED
FOREST RD

TUBERS

GREENWOOD

MORA

GRANT

OAK

WONEY

LAKE

BERRY

FAIRWAY

BRANNON

LINCOLN

SILVERADO TRAIL

FOOTHILL

WASHINGTON

DUNAWAY



Figure 1

CITY OF CALISTOGA
STUDY AREA

City
of
Calistoga



Figure 2

Existing Traffic
Volumes

TABLE 1. TRAFFIC VOLUME SUMMARY

STREET Segment	24-HOUR VOLUME	AM PEAK	PM PEAK
LINCOLN AVENUE			
Foothill-Cedar	9230	408	791
Cedar-Washington	10105	438	866
Washington-Silverado	8660	101	736
n/o Silverado	5220	171	650
FOOTHILL BOULEVARD			
e/o Lincoln	8735	585	910
w/o Lincoln	7630	571	795
e/o Petrified Forest Rd	7630	505	808
w/o Petrified Forest Rd	5290	353	556
w/o Tubbs	2660	148	235
WASHINGTON STREET			
e/o Lincoln Avenue	4275	200	260
w/o Lincoln Avenue	3425	121	233
w/o Berry Street	2055	205	167
CEDAR STREET			
e/o Lincoln Avenue	810	33	74
w/o Lincoln Avenue	1030	45	87
e/o Berry Street	855	68	76
w/o Berry Street	920	63	92
SILVERADO TRAIL			
e/o Lincoln Avenue	2705	216	250
LAKE STREET			
Washington-Fair Way			
Fair Way-Grant	1990	116	125
Grant-Lincoln	1660	90	140
BERRY STREET			
Foothill Blvd-Cedar	1765	153	145
Cedar-Washington	2585	263	247
GRANT STREET			
e/o Lake Street	1535	83	133
w/o Lake Street	1525	119	145
TUBBS LANE			
n/o Highway 128	2390	180	201
THIRD STREET			
n/o Washington Street	605	60	49

TABLE 1. TRAFFIC VOLUME SUMMARY, Continued

STREET SEGMENT	24-HOUR VOLUME	AM PEAK	PM PEAK
FAIR WAY			
w/o Lincoln	2195	160	181
e/o Lake Street	420	34	34
w/o Lake Street	330	27	27
STEVENSON STREET			
w/o Lincoln	1455	101	131

Source: Allan G. Tilton, P.E. 1990

Street Classifications

The City street network is comprised of several street types and classifications. Street systems (networks) include local streets which serve as access to individual properties, arterial streets which serve the movement of vehicles, and collector streets which serve as a transition between local and arterial streets. Arterial, collector and local streets serve different functions within the circulation network and have different design requirements.

TABLE 2. STREET FUNCTION

Classification	Function	Access	Intersection Spacing	Speed Limits MPH	Parking
Arterial	Traffic movement	Limited	1/4 mile	30-35	Limited
Collector	Distribute traffic	Yes	300 Ft	25-30	Yes
Local	Local Use	Yes	175 Ft	25	Yes

Source: Allan G. Tilton, P.E. (1988)

Street classification assignment of the existing circulation system elements is made. The classification of existing streets is based upon the functional characteristics that the street emulates. Figure 3 shows the study area street network by functional classification. The following are the study area functional street classifications as determined by the consultant:

ARTERIAL STREETS

Foothill Boulevard/State Route 128
 Lincoln Avenue/State Route 29
 Silverado Trail
 Tubbs Lane
 Dunaweal Lane
 Petrified Forest Road

COLLECTOR STREETS

Washington Street
 Grant Street
 Lake Street
 Berry Street
 Cedar Street
 Oak Street
 Brannon Street
 Fair Way
 Mora Avenue
 Greenwood Avenue
 Money Lane

City
of
Calistoga

KEY

- LOCAL STREETS
- COLLECTOR STREETS
- ARTERIAL STREETS

PETRIFIED
FOREST RD

TUBBS

GREENWOOD

MORA

GRANT

OAK

MOKEY

LAKE

BERRY

FAIRMAY

BRANNON

LINCOLN

FOOTHILL

WASHINGTON

SILVERADO TRAIL

DUNAWAL



Figure 3 STREET CLASSIFICATION

LOCAL STREETS

All other streets

Street Capacities

Average daily traffic (ADT) is the number of vehicles on a street or roadway during a 24-hour period on an average weekday. It is often useful for planning purposes to compare the actual or projected traffic volumes to street vehicle carrying capacities. Street capacities are influenced by such factors as street width, number of lanes, parking, and traffic controls. The capacity of arterial streets is measured by the effectiveness of the street to serve the movement of vehicles.

Concepts

The concept of levels of service is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and passengers. A level of service definition generally describes these conditions in terms of such factors as speed and travel time, delay, freedom to maneuver, traffic interruptions, comfort and convenience and safety.

Six levels of service are defined for each type of facility that is analyzed. They are given letter designations, from A to F, with level-of-service A representing the best operating conditions and level-of-service F the worst.

The level of service concept was introduced in the 1965 Highway Capacity Manual (Ref. A4). Additional measures of effectiveness have been introduced in the 1985 Highway Capacity Manual (Ref. 7). Use of letter designations to describe operational characteristics of a transportation facility has been used by traffic engineers and transportation planners for many years and constitutes accepted professional practice.

Environmental Capacity

Roadway capacity in the traditional sense has been defined as the vehicle carrying capacity of a roadway or street. These capacities are often measured at intersections where the greatest potential for congestion occurs. Residential streets, although they have a traffic function, also have neighborhood functions which are related to the environment they serve. The effectiveness of the street cannot be determined solely by the ability to carry maximum numbers of vehicles. The concept of "environmental capacity" has been developed to address the environmental issues. Environmental capacity can be defined as the volume and character of traffic permissible on a particular street consistent with the maintenance of good environmental conditions.

Research into the "environmental capacity" of a street or roadway has been conducted and is continuing to be studied. Several studies, Traffic in Neighborhoods: Policies for More Liveable Streets, Appleyard (Ref. 2); "Environmental Traffic Standards," Traffic Related Environmental Capacity Study (Ref. 14), prepared for the San Luis Obispo Citizens Advisory Committee, have concluded that residential streets have a capacity where residents living along that street begin to experience a loss of residential character. The level, as documented in the Appleyard study, has found that when the street in front of the home has reached 2000 vehicle passbys in the average day (200 vehicles per hour during the peak hour) the neighborhood character of the street deteriorates. In a study by Buchanan (Ref. 3), it was noted that changes in pedestrian mobility are affected when the street volume reached 200 vehicles per hour on a thirty-foot wide street. The Vulkan and MacBride study (Ref. 12) concluded "The size and character of a proposed environmental area should be chosen to keep internal flows below 300 vehicles per hour." The San Luis Obispo study found that the threshold of marginal acceptability on residential streets was 2700 vehicle passbys per day and the threshold of unacceptability was 3400 vehicle passbys per day.

When traffic volumes on a residential street reach 2000 vehicle passbys per day (200 per hour during the peak hour), a loss in residential character is noticed. Pedestrian freedom is lost, noise levels become more noticeable, and traffic odors and dirt become objectionable at levels above 2000 vehicle passbys per day. When traffic volumes on residential streets reach 2700-3400 vehicles per day, the residential character of a street is adversely affected. Collector, arterial and expressway streets serve to consolidate traffic volumes on those streets and reduce the potential for excess traffic flows on residential streets. The daily traffic volume of residential streets should be below the threshold where a loss of residential character is noticed.

Table 2A shows the current levels of service at intersections within the study area. Table 2B shows the level of service for selected street segments. Existing levels of service are based upon existing intersection conditions. Levels of service are presented for the existing evening peak hour conditions. Figure 4 shows intersection level of service and areas of congestion within the study area.



Figure 4

EXISTING STREET
LEVEL OF SERVICE

TABLE 3A. LEVEL OF SERVICE FOR INTERSECTIONS IN THE STUDY AREA, EXISTING CONDITIONS

INTERSECTION	LEVEL OF SERVICE EXISTING PM PEAK
SIGNALIZED Lincoln Ave/ Washington St	6.0/B
UNSIGNALIZED Petrified Forest Rd/ Foothill Blvd.	A/E/A
Lincoln Ave/ Cedar St	A/C/A
Lincoln Ave/ Silverado Trail	A/D/A
ALL-WAY STOP Foothill Blvd/ Lincoln Ave	D
Berry St/ Cedar St	A
Berry St/ Washington St	A
Lake St/ Fair Way	A
Lake St/ Grant St	A

(a) Level of service signalized intersection, Sec. of delay.

(b) Level of service Left turn-in/Left turn-out/Right turn-out.

Source: Allan G. Tilton, P.E., (1990).

TABLE 3B. EXISTING LEVEL OF SERVICE, SELECTED STREET SEGMENTS

STREET	DAILY TRAFFIC VOLUME	PEAK VOLUME	STREET CLASS	VOLUME/ CAPACITY	LEVEL OF SERVICE
LINCOLN AVENUE					
Foothill-Cedar	9230	790	A	.34	D
Cedar-Washington	10150	865	A	.37	D
Washington-Silverado	8660	735	A	.31	D
n/o Silverado	5220	650	A	.28	C
FOOTHILL BOULEVARD					
Dunaweal-Lincoln	8735	910	A	.39	D
Lincoln-Berry	7630	795	A	.34	D
Berry-Pet. Forest	7630	810	A	.35	D
Pet. Forest-Tubbs	5290	555	A	.24	C
SILVERADO TRAIL					
Dunaweal-Lincoln	2705	250	A	.11	B
CEDAR STREET					
e/o Lincoln	810	75	C	.03	A
Lincoln-Berry	1030	85	C	.04	B
Berry-Oak	920	90	C	.04	B
WASHINGTON STREET					
e/o Lincoln	4275	260	C	.12	B
Lincoln-Berry	3425	230	C	.11	B
Berry-Lake	2055	170	C	.08	B
LAKE STREET					
Fair Way-Grant	1990	125	C	.06	B
Grant-Lincoln	1660	140	C	.06	B
BERRY STREET					
Foothill-Cedar	1765	145	C	.07	B
Cedar-Washington	2585	250	C	.11	B
GRANT STREET					
Stevenson-Lake	1535	135	C	.06	B
Lake-Michael	1525	145	C	.07	B

Source: Allan G. Tilton, P.E. (1990)

IV. GENERAL PLAN LAND-USE ALTERNATIVES

This report summarizes the results of the evaluation of the three land use alternatives currently being considered by the City. Future traffic volumes are based upon computerized circulation system modeling. The modeling methodology is briefly summarized here in order to provide a framework for understanding the results. Several important transportation analysis concepts need to be understood for this report to be useful to the reader.

Model

Urban transportation planning is a process that leads to decisions on transportation policies and programs. In this process, planners develop information about the impacts of implementing alternative courses of action involving transportation services, such as new highways, public transit, and increased capacity on existing facilities. This information is used to help decision-makers (City staff, elected officials and citizens) in their selection of transportation policies and programs.

The transportation planning process relies on travel demand forecasting, which involves predicting the impacts that various policies and programs will have on travel in the urban area. The forecasting process also provides detailed information, such as traffic volumes to be used by engineers and planners in their designs.

In general, travel demand forecasting attempts to quantify the amount of travel on the transportation system. Within the travel model, land use is considered to be the primary force "driving" the generation and distribution of trips. The model assumes that land use influences travel, but transportation systems are not assumed to influence land uses.

The study area is subdivided into eight sub-regions. Factors which influence traffic patterns and trip generation include the quantity and location of housing, commercial, and industrial areas. The land-use characteristics of the study area sub-regions are summarized in Table 4. The study area sub-regions shown in Figure 5. Study area sub-regions are further divided into Traffic Analysis Zones (TAZ's). Figure 6 shows the study area Traffic Analysis Zones.

KEY

LOCAL STREETS

COLLECTOR STREETS

ARTERIAL STREETS

SUB-REGION

BOUNDARY

City
of
Calistoga



Figure 5

STUDY AREA
SUB-REGIONS

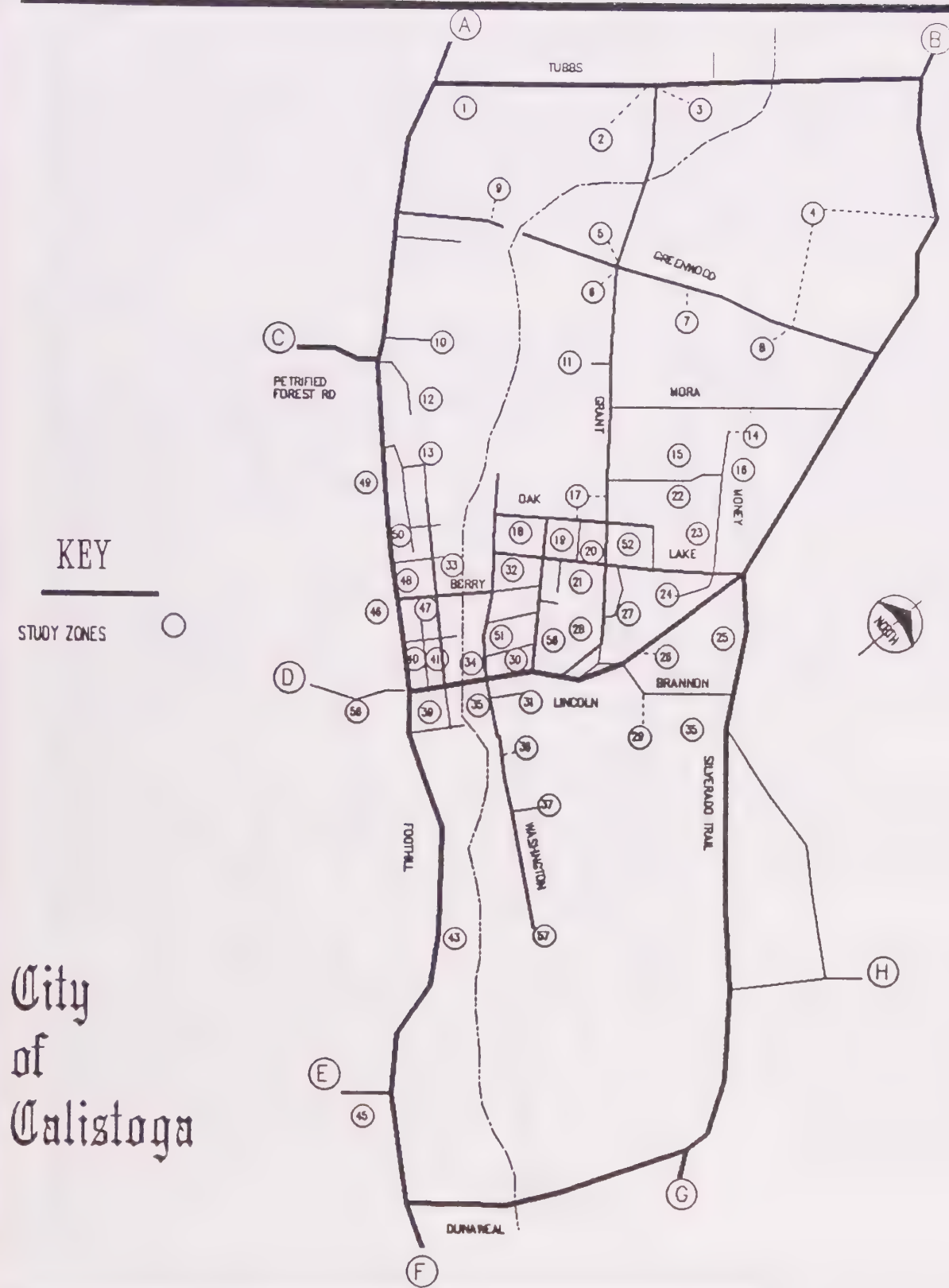


Figure 6

STUDY AREA ZONES
AND EXTERNAL STATIONS

TABLE 4. PROJECTED DEVELOPMENT BY STUDY AREA SUB-REGION

SUB- REGION	LOW INTENSITY			ALTERNATIVE MIX INTENSITY			HIGH INTENSITY		
	RES	COM	IND	RES	COM	IND	RES	COM	IND
1	9	17516	0	9	17516	0	0	32516	0
2	340	256286	0	440	262086	0	516	314286	0
3	15	20000	446495	40	20000	519240	139	20000	519240
4	136	0	0	312	0	0	278	390079	0
5	144	0	0	467	0	0	950	0	0
6	130	42240	0	135	54240	0	126	224995	0
7	43	0	0	43	0	0	0	32499	0
8	98	721646	0	336	721646	0	355	1923947	216180
	====	=====	=====	====	=====	=====	====	=====	=====
TOTAL	915	1057688	446495	1782	1075488	519240	2364	2938322	735420

UNITS

RES = Dwelling Units

COM = Square Feet of Building

IND = Square Feet of Building

Projection

The population projections upon which the travel model are based are the three land-use alternatives currently under consideration. The projections include residential, commercial/office, and industrial land uses. The areas of future population increase are expected to occur in the northwesterly and northeasterly quadrants of the City of Calistoga. Table 5 summarizes the study area projections for population, jobs and housing.

TABLE 5. ALTERNATIVE SUMMARY

CATEGORY	EXISTING	GENERAL PLAN ALTERNATIVES			
		CURRENT	LOW	MIXED	HIGH
POPULATION	4374 (a)	7100	6300	8050	9200
JOBS	3200	5300	5600	5610	7700
Jobs/Pop	0.73	0.75	0.89	0.70	0.83
HOUSING	2074	3715	4065	4070	5825

a) Ref. 4

Employment projections are expected to increase in both retail and non-retail sectors. The principal retail employment areas are anticipated to develop adjacent to the Lincoln Avenue corridor. Non-retail employment is anticipated to occur in the northeasterly quadrant of the City adjacent to Silverado Trail and Washington Street.

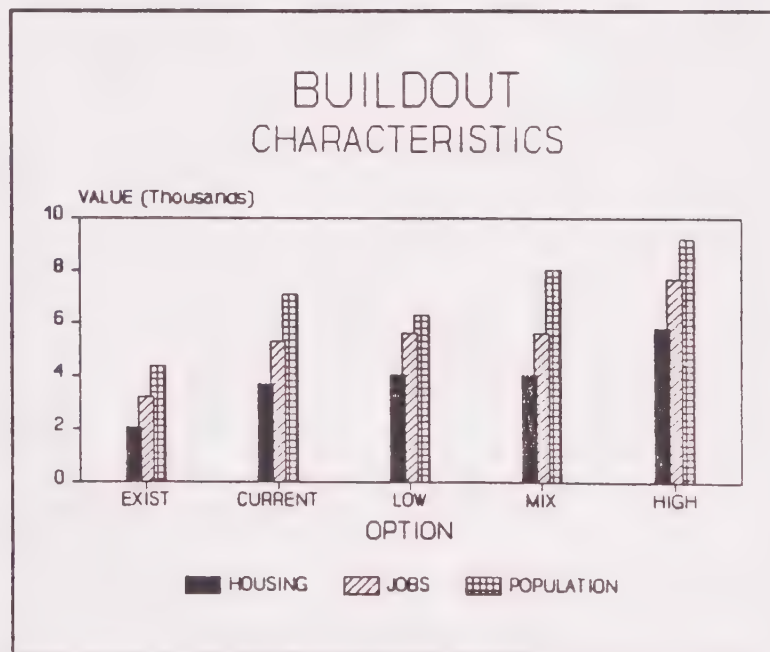


Figure 7 ALTERNATIVE LAND-USE BUILDOUT CHARACTERISTICS

Trip Generation

Trip generation rates used for this analysis were taken from the Institute of Transportation Engineers, Trip Generation, An Informational Report (Ref. 8). For the purposes of this analysis it is assumed that all developments within the study area will be new.

Trip generation of residential development is projected at 10.0 trips per dwelling unit. Commercial land uses are proportioned at 50% retail/50% office, using 50,000 square-foot average development trip generation rates. Table 6 summarizes the trip generation potential of new development within the project area by study area sub-region.

As seen in Table 6 the Low Intensity development alternative will generate approximately 71,500 additional trips to the area circulation system. The Mixed Intensity development alternative will generate approximately 81,700 trips per day to the area circulation system. The High Intensity development alternative has significantly greater trip generation potential with an estimated 193,300 trips per day.

Trips generated by existing and anticipated development of lands within the City of Calistoga sphere of influence are assigned to the existing circulation network. The traffic network model is then used to evaluate the travel patterns of future trips.

Projected traffic volumes on selected street segments are compared to existing traffic volumes. Traffic volumes in the downtown core area on Lincoln Avenue will remain near current values. Traffic congestion occurs on Lincoln Avenue between Cedar Street and Fair Way and traffic volume increases on Lincoln Avenue will be limited by existing constraints. Traffic volume increases which cannot be accommodated on Lincoln Avenue will be diverted to other city streets. Table 7 shows existing and projected traffic volumes together with volume to capacity ratios and level of service for selected street segments. Figure 8 shows the traffic volume projections of selected street segments.

TABLE 6 PROJECTED TRIP GENERATION BY STUDY AREA SUB-REGION

SUB- REGION	LOW INTENSITY			ALTERNATIVE MIX INTENSITY			HIGH INTENSITY		
	RES	COM	IND	RES	COM	IND	RES	COM	IND
1	90	981	0	90	981	0	0	1821	0
2	3400	14352	0	4400	14677	0	5160	17600	0
3	150	1120	3125	400	1120	3635	1390	1120	3635
4	1360	0	0	3120	0	0	2780	21844	0
5	1440	0	0	4670	0	0	9500	0	0
6	1300	2365	0	1350	3037	0	1260	12600	0
7	430	0	0	430	0	0	0	1820	0
8	980	40412	0	3360	40412	0	3550	107741	1513
	=====	=====	=====	=====	=====	=====	=====	=====	=====
	9150	59231	3125	17820	60227	3635	23640	164546	5148
		=====			=====			=====	
TOTAL		71506			81682			193334	

RES = Dwelling * 10.0

COM = 50% Office @ 50 ksf + 50% Retail @ 50 ksf

IND = 7.0 * ksf

ksf = 1000 square feet

TABLE 7. EXISTING AND PROJECTED DAILY TRAFFIC VOLUMES, SELECTED STREET SEGMENTS

STREET	EXISTING	LAND USE ALTERNATIVE		
		LOW	MIX	HIGH
1 EASTERN-CROSSING		2686	3334	5061
2 NEW OAK STREET		2478	2703	2083
3 NEW SPARROW/SWALLOW		3088	4610	4562
4 NEW FAIR WAY		1846	3974	4142
5 FOOTHILL E/O LINCOLN	8735	11444	11717	11343
6 FOOTHILL W/O LINCOLN	7630	10118	10919	14831
7 FOOTHILL W/O PFR	5290	6670	7953	10333
8 GRANT STREET	1555	3492	3256	4022
9 LINCOLN S/O WASHINGTON	10100	12633	12364	11942
10 WASHINGTON E/O LINCOLN	4275	3465	3729	6305
11 LINCOLN S/O SILVERADO	8660	10419	10101	11014
12 WASHINGTON W/O LINCOLN	3430	6573	4637	5606
13 NEW WASHINGTON EXT		2040	4048	4009
14 DUNAWAAL		3365	4512	4453

Source: Allan G. Tilton, P.E. (1990)

TABLE

SEGMENT	EXIST	LOW	ALTERNATIVE MIXED	HIGH
LINK 1		2888	3334	5081
LINK 2		2478	2703	2083
LINK 3		3088	4670	4582
LINK 4		1848	3974	4742
LINK 5	8735	11444	11717	11343
LINK 6	7630	10118	10919	14831
LINK 7	5290	8870	7953	10333
LINK 8	6555	3492	3258	4022
LINK 9	10700	12833	12384	17942
LINK 10	4275	3485	3729	8305
LINK 11	8860	10419	10701	11074
LINK 12	3430	8573	4837	5808
LINK 13		2040	4048	4009
LINK 14		3385	4512	4453

KEY

LOCAL STREETS

COLLECTOR STREETS

ARTERIAL STREETS

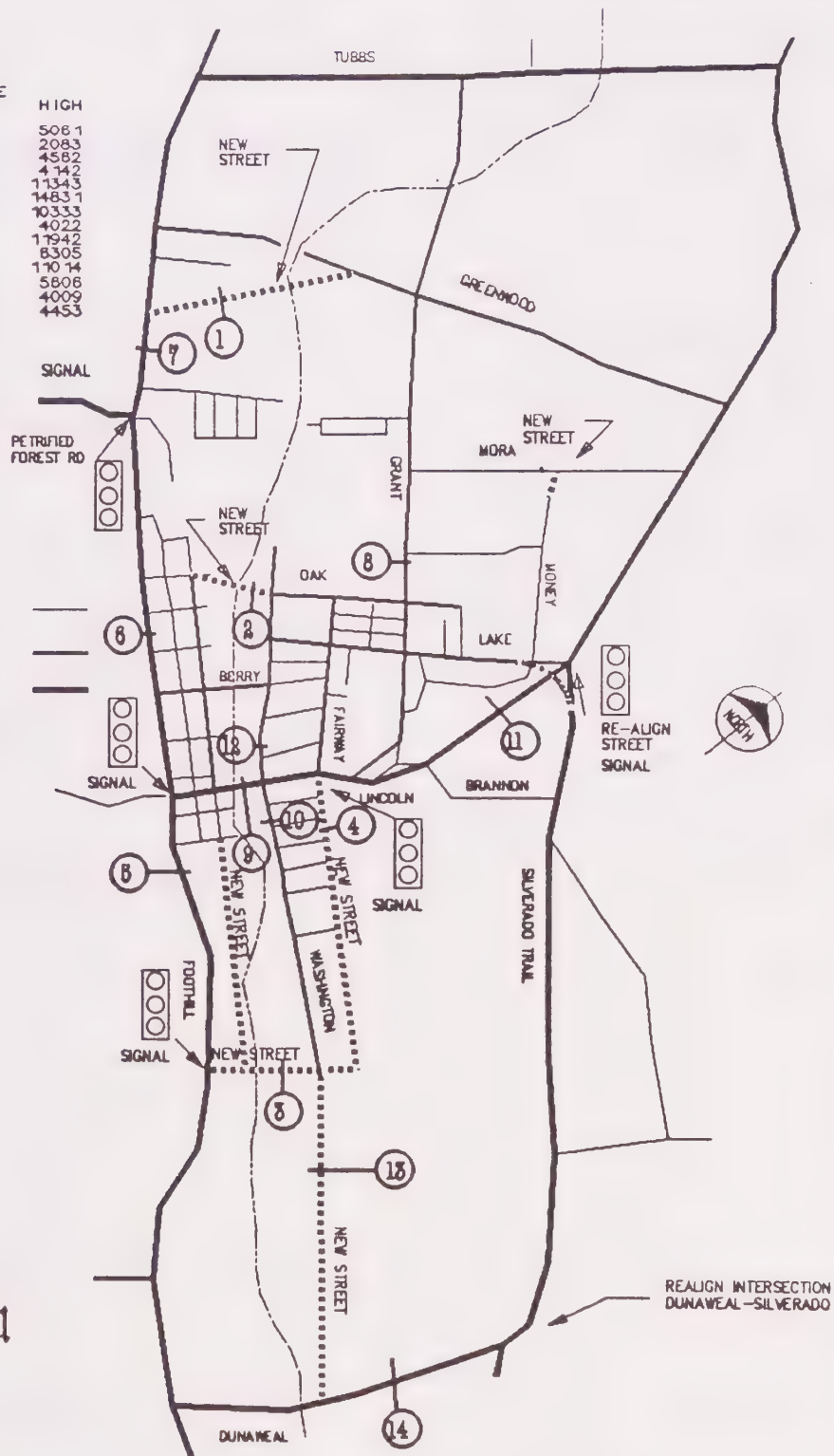
City
of
Calistoga

Figure 8

SCREEN LINE TRAFFIC
VOLUME CONTROL POINTS

V. RECOMMENDED TRANSPORTATION PLANNING GUIDELINES

Mitigation measures will be needed to address the existing needs. Mitigation measures can take the form of active measures and planning measures.

Active mitigation measures fall into two categories: physical and operational improvements to street and highway systems. Physical improvements include addition of lanes to streets and highways, alternative route construction, and signal installation. Operational improvements include signal timing optimization, on-street parking, public transportation, and system management.

A. The following outlines the recommendations of the consultant with respect to physical improvements:

1. Realignment of Silverado Trail/Lake Street at Lincoln Avenue.
2. Provide left turn lanes at:

Foothill Boulevard at Petrified Forest Road
Lincoln Avenue at Silverado Trail
Lincoln Avenue at Mora Avenue
3. Signalization of:

Foothill Boulevard at Petrified Forest Road
Foothill Boulevard at Lincoln Avenue
Lincoln Avenue at Silverado Trail
4. Widen Foothill Boulevard to 64' curb-to-curb. This improvement will accommodate four travel lanes together with left turn lanes at intersections or bicycle lanes.
5. Widen Grant Street to 40' curb-to-curb. This improvement will accommodate two travel lanes together with left turn lanes at intersections or bicycle lanes.

- B. The following outlines the recommendations of the consultant with respect to operational improvements:
1. Provide bike lanes on all arterial and collector streets.
 2. Consider installation of signing to divert through truck traffic from the downtown core.

Figure 8 shows the location of major street improvements within the City of Calistoga.

- C. The following outlines the recommendation of the consultant with respect to future planning guidelines:
1. Prohibit direct driveway connections from single family residence dwellings onto arterial and collector streets.
 2. Minimize multi-family and commercial driveway connections to arterial streets.
 3. Provide adequate off-street parking within the downtown core.
 4. Require the construction of sidewalks on all residential, collector and arterial streets.

Circulation Design Standards

Circulation design standards for new streets were reviewed. Suggested design criteria as presented by the Institute of Transportation Engineers, Transportation and Land Development (Ref. 11), and Recommended Guidelines for Subdivision Streets (Ref. 10), represent practical guidelines for new street construction. Table 8 summarizes the various recommended street design elements.

TABLE 8. RECOMMENDED STREET DESIGN STANDARDS

Classification	Function	Access	Intersection Spacing	Speed Limits MPH	Parking	Curb Curb Width	Right/Way Width	Side Walks	Design Traffic Volumes VPD
URBAN									
Arterial	Traffic movement	Limited	1/4 mile	30-35	Limited	52-68	64-88	Yes	5,000-20,000
Collector	Distribute traffic	Yes	300 Ft	25-30	Yes	40-48	60-68	Yes	1,000-5,000
Local	Local Use	Yes	175 Ft	25	Yes	28-36	48-56	Yes#	>1,000
RURAL									
Arterial	Traffic movement	Limited	1/4 mile	35-50	Limited	40-64	60-84*	Yes#	5,000-20,000
Collector	Distribute traffic	No	300 Ft	25-30	Limited	36-40	56-60*	No#	1,000-5,000
Local	Local Use	No	175 Ft	25	Limited	24-32	44-52*	No#	>1,000

* Right-of-way may vary to accommodate slopes in hillside areas.

Pedestrian facilities shall be provided near schools and centers of pedestrian activity. In rural areas pedestrian pathways may be used.

Source: Allan G. Tilton, P.E. (1990)

VI. NEW STREETS AND STREET EXTENSION

The following physical circulation improvements are recommended by the Consultant to address the projected future needs.

1. Extend Money Lane to Mora Avenue.
2. Extend Washington Street to Dunaweal Lane.
3. Construct a new street crossing of the Napa River at Oak Street.
4. Construct a new street crossing of the Napa River at or near Greenwood Avenue.
5. Construct a new street (Sparrow/Swallow Street) and crossing of the Napa River between South Washington Street and Foothill Boulevard.
6. Extend Fair Way southeasterly to the extension of Sparrow/Swallow Street.

The impacts of the three land-use alternatives together with the impacts of new street segments, were evaluated. The results of this evaluation are shown in Table 9. As seen in Table 9 the relative impacts of the Low Intensity and Mixed Intensity land-use options are similar. The projected impacts of the High Intensity land-use alternative are greater than those of Low and Mixed Intensity land-use alternatives.

Circulation improvement costs are estimated. The cost for roadway improvements are estimated at \$5.00 per square-foot of roadway area, traffic signals are estimated at \$100,000.00 for each installation and bridge crossings of the Napa River are estimated at \$150,00.00 for each installation. The cost of these improvements are summarized in Table 10.

TABLE 9. EXISTING AND PROJECTED LEVEL OF SERVICE, SELECTED STREET SEGMENTS

S E G M E N T	STREET	EXISTING			ALTERNATIVE LOW			MIXED			HIGH		
		DAILY TRAFFIC VOLUME	V/C	LOS	DAILY TRAFFIC VOLUME	V/C CAP LOS	LOS	DAILY TRAFFIC VOLUME	V/C CAP LOS	LOS	DAILY TRAFFIC VOLUME	V/C	LOS
1	EASTERN-CROSSING				2686	.12	B	3334	.14	B	5061	.22	C
2	NEW OAK STREET				2478	.10	B	2703	.11	B	2083	.09	B
3	NEW SPARROW/SWALLOW				3088	.13	B	4610	.20	C	4562	.20	C
4	NEW FAIR WAY				1846	.08	B	3974	.17	C	4142	.18	C
5	FOOTHILL E/O LINCOLN	8735	.37	D	11444	.49	D	11717	.50	D	11343	.49	D
6	FOOTHILL W/O LINCOLN	7630	.33	D	10118	.43	D	10919	.47	D	14831	.63	E
7	FOOTHILL W/O PFR	5290	.23	C	6670	.28	C	7953	.34	D	10333	.44	D
8	GRANT STREET	1555	.07	B	3492	.15	B	3256	.14	B	4022	.17	C
9	LINCOLN S/O WASHINGTON	10100	.43	D	12633	.54	D	12364	.53	D	11942	.51	D
10	WASHINGTON E/O LINCOLN	4275	.18	B	3465	.28	C	3729	.16	C	6305	.27	C
11	LINCOLN S/O SILVERADO	8660	.37	D	10419	.45	D	10101	.43	D	11014	.47	D
12	WASHINGTON W/O LINCOLN	3430	.15	B	6573	.28	C	4637	.20	C	5606	.24	C
13	NEW WASHINGTON EXT				2040	.09	B	4048	.17	C	4009	.17	C
14	DUNAWAAL				3365	.14	B	4512	.19	D	4453	.19	C

(1) Existing Network

(2) Modified Network

Source: Allan G. Tilton, P.E. (1990)

TABLE 10. COST OF IMPROVEMENTS

STREET	IMPROVEMENT	ESTIMATED COST (a)
Lincoln Ave/ Silverado Trail	Realignment Signalization	\$ 200 100
Petrified Forest Rd/ Foothill Blvd	Signalization Street Widening	100 400
Lincoln Ave/ Foothill Blvd	Signalization Street Widening	100 400
Western Crossing	Bridge New Street	150 260
Oak Street	Bridge New Street	150 80
Sparrow St Eastern Crossing	Bridge New Street	150 200
Grant St	Street Widening	320
Washington St	New Street	600
Fair Way Extension	New Street	300
		=====
TOTAL		3,510

(a) Costs in Thousands of Dollars.

Source: Allan G. Tilton, P.E. (1990)

Improvements such as new street construction and bridge construction and highway reconstruction are costly and are beyond the ability of most single developments to finance. Large scale improvement projects of this magnitude meet the needs of City and regional growth and are beneficial to a large segment of the community.

The intersections of Foothill Boulevard at Petrified Forest Road, Foothill Boulevard at Lincoln Avenue, Foothill Boulevard at Sparrow Street, Lincoln Avenue at Fair Way and Lincoln Avenue at Silverado Trail will require installation of traffic signals. The estimated costs of these improvements, less right-of-way acquisition, are estimated at \$3,510,000.00

The cost to benefit ratio is evaluated. The projected benefit is based upon the number of vehicles projected to use the improvement while the costs are based upon Table 10. The results of this evaluation are shown in Table 11.

TABLE 11. IMPROVEMENT COST/BENEFIT RATIO AND RANKING

STREET RANK	IMPROVEMENT	ESTIMATED COST (a)	VEHICLES USAGE (VPD)	RATIO	
Lincoln Ave/ Silverado Trail	Realignment Signalization	200 100	16800	.24	3
Pet. Forest Rd/ Foothill Blvd	Signalization Street Widening	100 400	24300	.21	1
Lincoln Ave/ Foothill Blvd	Signalization Street Widening	100 400	23700	.21	2
Greenwood Ave	Bridge Street Widening	150 260	4100	1.00	7
Oak Street	Bridge New Street	150 80	1100	2.09	8
Sparrow St	Bridge New Street	150 120	3400	.79	6
Grant St	Street Widening	320	4500	.71	4
Washington St	New Street	600	700	8.57	9
Fair Way Ext	New Street	300	4000	.75	5
		=====			
TOTAL		\$ 3,510			

(a) Costs in Thousands of Dollars.

(VPD) Vehicles per day.

Source: Allan G. Tilton, P.E. (1990)

As seen in the preceding table, the improvements which best serve the needs of the community are the intersection improvements at Lincoln Avenue at Foothill Boulevard and Foothill Boulevard at Petrified Forest Road. Realignment and signalization of the intersection of Lincoln Avenue at Silverado Trail ranks third. Grant Street widening and the construction of the proposed Sparrow Street connection between Washington Street

and Foothill Boulevard should be considered as significant improvements. The extension of Washington Street to Dunaweal Lane is the least cost effective improvement.

The extension of Oak Street and the construction of a new crossing of the Napa River is not as cost effective as other improvements. The extension of Oak Street, together with a new Napa River crossing, will provide an alternative route for traffic flows which will significantly decrease the traffic demand on Berry Street. It is the opinion of the consultant that this improvement be given high priority.

Major Highway Funding Alternatives

Major highway improvement programs, such as freeway construction, are beyond the financial means of small developments. Major street and highway improvements address the needs of impacts and regional growth. Funding of large circulation system improvements are the responsibility of City, County, and State governments.

STATE TRANSPORTATION IMPROVEMENT PROGRAM. Any that exceeds the local Caltrans District authority must be included in the STIP, regardless of funding source.

DEVELOPMENT FEE. A development fee could be established to finance improvement projects. The definition of an area of benefit is difficult, which is similar to the formation of an assessment district. The fee schedule can be based upon trip generation and can be applied to undeveloped land in the benefit area. Development fees can also be applied to projects which intensify traffic within the benefit area.

INCREASED GAS TAX. There are provisions in the State law that allow an increase in gasoline taxes on a County-wide basis. An increase in gasoline taxes will have to be approved by the voters.

INCREASED SALES TAX. An increase in sales tax, with revenues specifically for road/transportation improvements, is a method of funding major improvement projects. An increase in sales taxes will have to be approved by the voters.

CITY INVOLVEMENT. The funding of major improvement projects, such as construction of new streets, new bridges and street reconstruction are beyond the financial capability of a single developer. The City of Calistoga should act as the lead agency for determining the financing mechanism needed to implement the necessary improvement program.

VII. DOWNTOWN PARKING

The downtown core of the City of Calistoga serves as the commercial, office, and government center of the community. The downtown core consists of a three block segment of Lincoln Avenue between Cedar Street and Stevenson Street. Figure 9 shows the limits of the downtown core area.

The downtown core area provides a wide range of commercial enterprises. Commercial activity within the downtown core serves both area residents and visitors. Services which are often associated with daily community activities are found in the downtown core. These activities include grocery stores, pharmacies, hardware and dry goods stores, banks, and governmental services. Tourist commercial activities include resort hotels, restaurants and specialty shops.

The need for adequate parking within the downtown core is an objective of all factions of the community. Residents wish to find convenient parking when shopping or conducting business downtown. Merchants and business people likewise want adequate parking for customers and employees.

When parking needs within the downtown core are not met parking demand can overflow into adjacent residential neighborhoods. Residents within the effected neighborhoods can experience inconveniences caused by parking overflow. Prospective customers of community and tourist oriented retail shops can be discouraged by lack of adequate parking.

The existing parking supply is inventoried as part of this study. Parking within the downtown core consists of on-street parking, public off-street parking and private off-street parking. Table 12 summarizes the available parking within the downtown core.

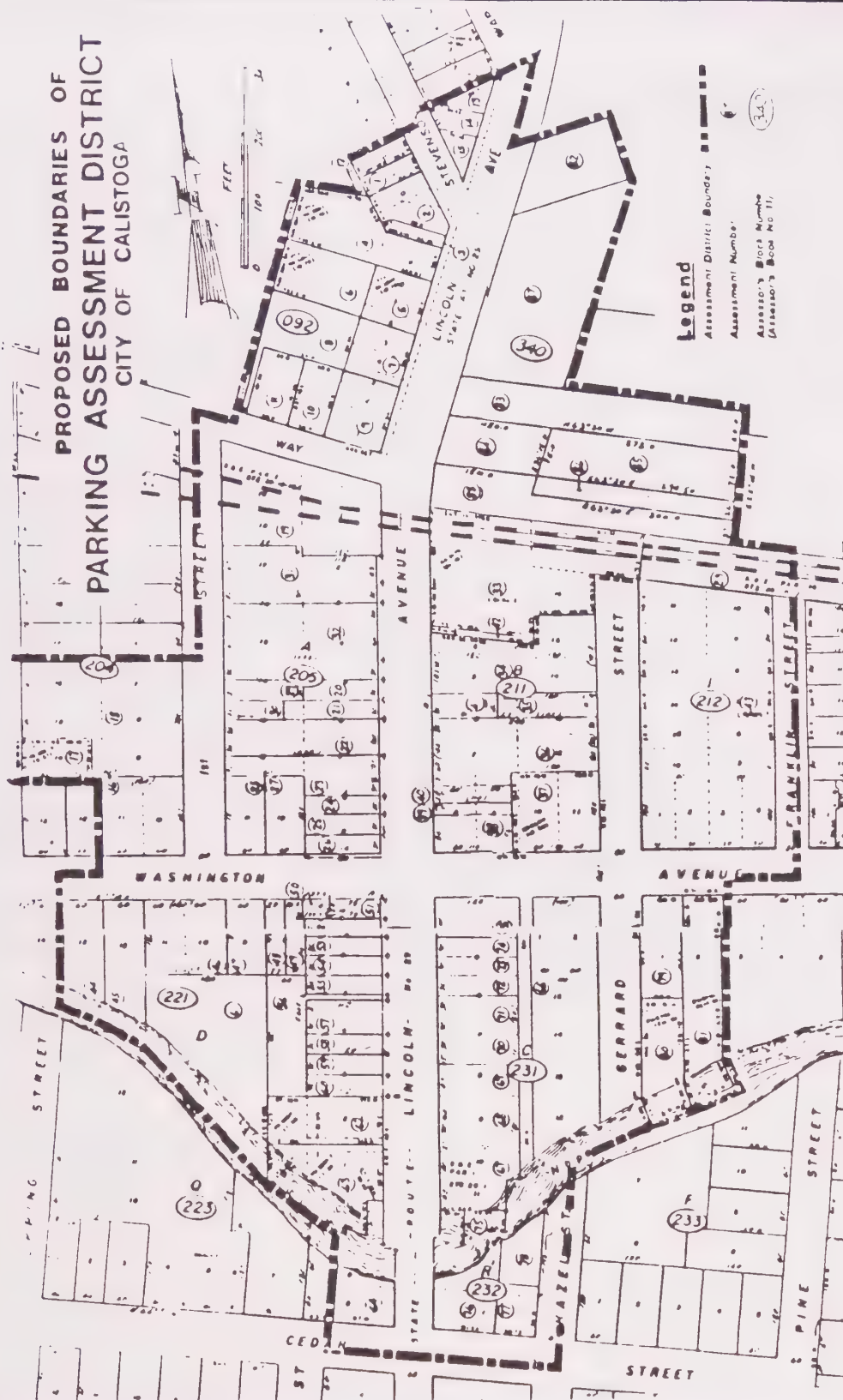


Figure 9 DOWNTOWN CORE AREA
PARKING DISTRICT

TABLE 12. EXISTING PARKING SUPPLY

Type	Amount
On-Street	137
Off-Street	
Public	117
Private	412
TOTAL	666

Source: Allan G. Tilton, P.E. (1990)

Parking Demand

The downtown core is evaluated to determine the parking need. Available retail, commercial and office space has been inventoried. The downtown core currently provides approximately 450,000 square feet of commercial, office and retail space. The parking supply within the downtown core area is approximately 666 spaces.

The City of Calistoga Zoning Ordinance establishes rates for specific land use categories. Commercial off-site parking requirements range from one parking space for each 100 square feet of leasable floor space for restaurants to one space for each 250 square feet of leasable floor space for office land uses. Assuming an average parking demand of one space per 200 square feet of leasable floor space the total downtown parking demand is 2250 parking spaces. The projected parking shortfall within the downtown core area using City Zoning requirements is 3-to-1.

Alternative Analysis

The projected parking demand shown in Table 9 is the summation of individual parking needs. The downtown core is the amalgamation of four land uses, office, retail, motel and restaurant. The peak parking demand of each land use occurs at different times of the average day. The projected peak parking demand for the proposed motel occurs during the evening when the parking demand for office is low. The projected parking accumulation for the downtown core is approximately 1250 occupied spaces. The composite parking accumulation for the downtown is shown in Figure 10.

The projected parking demand based upon individual land uses and shopping center comparison exceeds the reservoir of available parking supply. The projected parking demand based upon individual land uses exceeds the parking supply by 3-to-1. The projected parking demand based upon the accumulation of individual land uses approximates the parking supply by a 2-to-1 margin.

It is the opinion of the Consultant that the City of Calistoga will need to establish a comprehensive program to address parking shortfalls in the downtown core area. A comprehensive program should include the following:

1. Establish a Downtown Parking Committee to evaluate alternative parking strategies to achieve a balanced parking plan for the downtown core area.
2. The City should adopt new off-street parking standards.
3. The City should adopt a policy establishing the first and second parking spaces adjacent to intersections in the downtown core area as limited time (20-Minute) spaces. This improvement will provide high turn around parking spaces and will facilitate the short term parking needs of local residents.
4. The City should provide additional directional signing to City parking facilities.

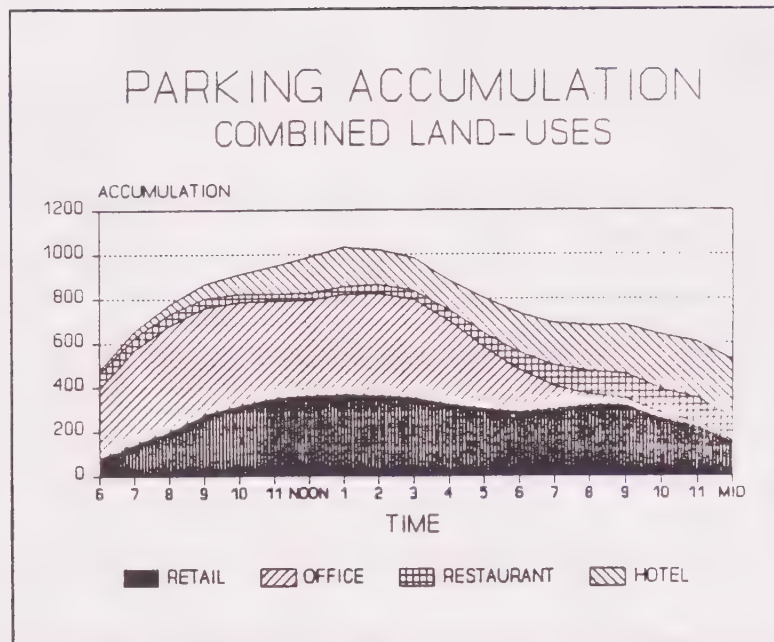


Figure 10 PARKING ACCUMULATION BY LAND-USE CATEGORY

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APPENDIX D
AIR ASSESSMENT

Project Name : Calistoga

Date : 07-21-1990

Analysis Year = 2010

Temperature = 70

EMFAC7 VERSION : EMFAC7C ... 1/4/87

Unit Type	Trip Rate	Size	Tot Trips	Days Op.
Residential (Existing)	10.0/Unit	1489	14890	
Industrial	7.0/1000 Sqf	374	2618	1
Commercial	56.0/1000 Sqf	717	40152	1

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Work	Non-Work
Trip Length	9.6	3.7	5.3	8.6	5.6
% Started Cold	88.6	40.4	58.8	77.8	27.6
Trip Speed	35	35	35	35	35
Percent Trip	27.3	21.2	51.5		

Vehicle Fleetmix

Vehicle Type	Percent	Type	Leaded	Unleaded	Diesel
Light Duty Autos	72.8		1.5	95.9	2.6
Light Duty Trucks	14.3		2.4	94.9	2.8
Medium Duty Trucks	4.3		5.9	94.2	0.0
Heavy Duty Trucks	3.9		33.3	66.7	N/A
Heavy Duty Trucks	3.9		N/A	N/A	100.0
Motorcycles	0.9		100.0	N/A	N/A

Project Emissions Report in Lb/Day

Unit Type	TOG	CO	NOX
Residential (Existing)	169.9	1730.7	283.5
Industrial	29.2	292.6	54.1
Commercial	371.5	3586.5	715.1

Project Name : Colistiga

Date : 37-21-1990

Analysis Year = 2010

Temperature = 70

EMFAC7 VERSION : EMFAC7C ... 1/4/87

Unit Type	Trip Rate	Size	Tot Trips	Days Op.
Residential (Mix)	10.0/Unit	1782	17820	
Industrial	7.0/1000 Sqf	1075	7525	1
Commercial	56.0/1000 Sqf	519	29064	1

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Work	Non-Work
Trip Length	9.6	3.7	5.3	8.6	5.6
% Started Cold	88.6	40.4	58.8	77.8	27.6
Trip Speed	35	35	35	35	35
Percent Trip	27.3	21.2	51.5		

Vehicle Fleetmix

Vehicle Type	Percent Type	Leaded	Unleaded	Diesel
Light Duty Autos	72.8	1.5	95.9	2.6
Light Duty Trucks	14.3	2.4	94.9	2.8
Medium Duty Trucks	4.3	5.9	94.2	0.0
Heavy Duty Trucks	3.9	33.3	66.7	N/A
Heavy Duty Trucks	3.9	N/A	N/A	100.0
Motorcycles	0.9	100.0	N/A	N/A

Project Emissions Report in Lb/Day

Unit Type	TGS	CO	NOX
Residential (Mix)	203.3	2071.3	339.3
Industrial	83.8	841.0	155.6
Commercial	268.9	2596.1	517.6

Project Name : Calistoga

Date : 06-05-1990

Analysis Year = 2010 Temperature = 70
 EMFAC7 VERSION : EMFAC7C ... 1/4/87

Unit Type	Trip Rate	Size	Tot Trips	Days Op
Residential (Low)	10.0/Unit	915	9150	
Industrial	7.0/1000 Sqf	1058	7406	1
Commercial	50.0/1000 Sqf	448	24976	1

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Work	Non-Work
Trip Length	9.6	3.7	5.3	8.6	5.6
% Started Cold	88.6	40.4	58.8	77.8	27.6
Trip Speed	35	35	35	35	35
Percent Trip	27.3	21.2	51.5		

Vehicle Fleetmix

Vehicle Type	Percent Type	Leaded	Unleaded	Diesel
Light Duty Autos	72.8	1.5	95.9	2.6
Light Duty Trucks	14.3	2.4	94.9	2.8
Medium Duty Trucks	4.3	5.9	94.2	0.0
Heavy Duty Trucks	3.9	33.3	66.7	N/A
Heavy Duty Trucks	3.9	N/A	N/A	100.0
Motorcycles	0.9	100.0	N/A	N/A

Project Emissions Report in Lb/Day

Unit Type	TOG	CO	NOX
Residential (Low)	104.4	1063.5	174.2
Industrial	82.5	827.7	153.1
Commercial	231.1	2230.9	444.8

Project Name : Calistoga

Date : 06-05-1990

Analysis Year = 2010

Temperature = 70

EMFAC7 VERSION : EMFAC7C ... 1/4/87

Unit type	Trip Rate	Size	Tot Trips	Days Op.
Residential (High)	10.0/Unit	2364	23640	
Industrial	7.0/1000 Sqf	2938	20505	1
Commercial	56.0/1000 Sqf	735	41160	1

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Work	Non-Work
Trip Length	9.6	3.7	5.3	8.6	5.6
% Started Cold	88.6	40.4	58.8	77.8	27.6
Trip Speed	35	35	35	35	35
Percent Trip	27.3	21.2	51.5		

Vehicle Fleetmix

Vehicle Type	Percent Type	Leaded	Unleaded	Diesel
Light Duty Autos	72.8	1.5	95.9	2.6
Light Duty Trucks	14.3	2.4	94.9	2.8
Medium Duty Trucks	4.3	5.9	94.2	0.0
Heavy Duty Trucks	3.9	33.3	66.7	N/A
Heavy Duty Trucks	3.9	N/A	N/A	100.0
Motorcycles	0.9	100.0	N/A	N/A

Project Emissions Report in Lb/Day

Unit Type	TOG	CO	NOX
Residential (High)	269.8	2747.8	450.1
Industrial	229.1	2298.4	425.1
Commercial	380.8	3676.6	733.0

APPENDIX E
NOISE ASSESSMENT

TECHNICAL SUPPLEMENT TO THE
NOISE ELEMENT OF THE CITY OF CALISTOGA GENERAL PLAN

PREPARED-BY:



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Sound Solutions acoustical consulting services

SUBMITTED TO:

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23 October 1989

I INTRODUCTION AND SUMMARY

Calistoga is currently a quiet community compared with the larger cities in the San Francisco Bay Region. Approximately 97% of the population lives in areas exposed to noise levels below the nominal state limit for residential areas. There are no heavy industrial facilities in the city, or heavily trafficked transportation routes.

The low existing sound levels imply that any newly introduced noise sources may give rise to land use conflicts. Careful planning is needed to insure compatibility of adjacent, differing uses.

Planning is also required to insure that proposed noise sensitive facilities, such as dwellings, are not approved in noisy areas unless appropriate noise mitigation measures are taken.

The purpose of the General Plan Noise Element is to provide the planning procedures and data necessary to avoid potential conflicts arising from noise issues. This information is related to that found in the other general plan elements.

Acceptable land uses given in the Land Use Element must be based, in part, on noise exposure. Planned new housing areas given in the Housing Element must take into account the fact that residential areas are noise sensitive. Traffic flow data in the Circulation Element has a bearing on the noise levels expected near transportation corridors and facilities. Conclusions contained in the Open Space Element regarding areas appropriately designated as open space must follow from an effort to protect recreational areas from excessive noise and/or to utilize open space as a buffer between noise sources and noise sensitive areas.

The following is a summary of the remaining sections of the Noise Element:

Section II: GLOSSARY

Needed acoustical terms are defined.

Section III: EXISTING AND FUTURE NOISE LEVELS

Existing noise sources and noise sensitive areas are identified. Noise levels due to roadways and other sources are presented. The exposure of the population of Calistoga to various levels of noise is given.

Section IV: GOALS, POLICIES AND STANDARDS

Standards are given in the form of noise level limits connected with various land uses and activities. Policies regarding the application of the standards are given.

Section V: IMPLEMENTATION PROGRAM

Procedures are given for the implementing the policies and standards. The agencies responsible are designated. The core of the program is presented as a pair of project evaluation flow charts.

II GLOSSARY

The acoustical terms and abbreviations defined below are used to describe sound in the Noise Element.

Noise

Noise is conventionally defined as unwanted sound.

dBA Sound Level Units

Sound levels are conventionally measured in units of decibels, abbreviated **dB**. **A** indicates that the sound signal is electronically processed to mimic the response of the human ear before the level in decibels is determined.

Changes in sound level are roughly correlated with changes in perceived loudness. A 3 dBA increase in sound level is barely noticeable to the human ear under normal circumstances. An increase by 10 dBA is generally perceived as at doubling of loudness.

Equivalent Sound Level, Leq

Essentially, Leq is a type of average sound level. An **Leq** is the level, in dBA units, of a fictitious steady state sound which would deliver the same acoustic energy during a given period of time as a time-varying, measured sound actually does deliver during the same period.

Day/Night Sound Level, Ldn

An **Ldn** is the average (Leq) level, in dBA units, during a one year period which results when 10 dBA are added to sound levels measured during night time hours (10 P.M. to 7 A.M.). Therefore, Ldn is a type of weighted average sound level which emphasizes noise levels measured during the more sensitive night time hours.

This descriptor is used as a measure of community noise exposure in many federal, state and local noise regulations and standards. It is the long term noise descriptor used in this noise element.

Percentile Sound Level, Lp

Lp is the sound level, in dBA units, which is exceeded p percent of the measurement period. For example, L10 is the sound level exceeded 10% of the time. L10 appears in some federal highway standards.

Noise Contours

Lines drawn on a map near a noise source indicating constant levels of noise. Leq and Ldn contours are utilized in this Noise Element.

Ambient Noise

The composite noise due to sources near and far. The level of ambient noise represents the normal level of environmental noise at a given location.

Tonal (or Pure Tone) Components

If a musical pitch may be associated with a sound, the sound is said to have a tonal component. Musical sounds are clearly examples. Other examples are sounds produced by transformers and rotating machinery. The perceived humming of such machinery is evidence of the presence of tonal components.

Intermittent Sound

Sound whose level varies appreciably with time and/or may be negligible over considerable periods. Examples: Construction machinery, aircraft flybys.

Impulsive Sound

Intermittent sound whose sound level may be relatively high, but for only brief periods of time, typically one second or less. Examples: Hammer blows, drum beats.

Intrusive Noise

Noise which is perceptible over the existing ambient noise at a given location. The degree of intrusiveness of a sound depends upon such factors as its level, duration, frequency, time of occurrence and tonal or informational content. In some cases, noise may be considered intrusive even if it is lower in level than the ambient.

III EXISTING AND FUTURE NOISE LEVELS

Noise levels have been measured in the City of Calistoga in connection with the preparation of this Noise Element and with other, previous studies[1,2,3]. In Table 1, a sampling of data is presented in order to provide an overview of the noise levels to which city residents may typically be exposed. Perceptual loudness evaluations are also provided to give some perspective on the dBA values.

Figure 1 shows the noise sources and noise sensitive areas in the City of Calistoga. The noise environment is generally dominated by motor vehicle traffic, although other sources must be considered at some places and times. The significant sources are discussed individually below.

A. Roadway Noise

Table 2 gives the locations of the Ldn noise contours near those roadways which may be important sources of noise. The contours are based upon measurements of existing noise levels and expected future changes in traffic volumes. They are nominal in the sense that they do not take account of any noise attenuating structures, such as fences and buildings, which may exist in some locations.

From the positions of the roadway contours, percentages of the population of Calistoga exposed to various Ldn values have been estimated. The resulting inventories are given in Table 3.

B. Calistoga Soaring Center

Ldn contours due to glider tow plane operations at the Calistoga Soaring Center are given in Figure 2. These contours were developed by CALTRANS in 1983, and are expected to approximate existing conditions.

The future of the soaring center is uncertain at the time of noise element preparation. No projected contours have been prepared.

C. Sprint Car Races at the Napa County Fairgrounds

These are isolated events, taking place on approximately five evenings each year. However, during the races, noise levels in the neighborhoods surrounding the fairgrounds are substantially higher than normal.

Because of their limited times and durations, Ldn (an annual average) is not an appropriate descriptor of the noise due to the races. The Leq during the event is more useful. Leq contours under typical race conditions are given in Figure 3.

D. Wind Machines

Several anti-frost wind machines exist in the agricultural areas zoned as Transitional Districts of the city. The intermittent and seasonal nature of their operation implies that the associated noise is best

described by the Leq value during operation. The locations of Leq contours around a typical wind machine are given in Table 4.

E. Other Noise Sources

In the recent past, noise generated by the Calistoga Mineral Water bottling plant has generated complaints from nearby residents. However, an acoustical analysis has led to a resolution of this problem.

Concern has also been expressed about noise produced by heavy trucks servicing the bottling plant. However, this potential noise source is not considered significant. The number of trips involved is small (approximately 10 per day), and no truck trips occur during nighttime hours or on weekends. Under these conditions, the trucks contribute negligibly to the average noise levels due to motor vehicle traffic in general.

Complaints were received about excessive noise produced by the Chrystal Geyser bottling plant when an exterior air compressor was added to existing refrigeration equipment. The problem was resolved when the compressor was surrounded by a noise attenuating enclosure.

City noise sources include sirens used in emergencies and occasionally tested at other times. While the sound levels involved are high, they are necessary for the purpose of these devices.

LOUDNESS DESCRIPTION	NOISE LEVEL IN dBA	REPRESENTATIVE NOISE SOURCE IN THE CITY OF CALISTOGA
THRESHOLD OF PAIN	130	
	120	
	110	AUTO HORN AT THREE FEET POP MUSIC IN BAR OR NIGHTCLUB
VERY LOUD	100	
	90	SPRINT CAR AT 100 FEET WIND MACHINE AT 200 FEET
MODERATELY LOUD	80	LOUD MOTORCYCLE CRUISING AT 50 FEET
	70	DIESEL TRUCK IDLING AT 50 FEET TOW PLANE IN NEIGHBORHOOD NEAR AIRFIELD
	60	CONVERSATIONAL VOICE LEVEL AT FOUR FEET
QUIET	50	AUTOMOBILE IDLING AT 50 FEET TYPICAL Ldn IN QUIET NEIGHBORHOOD
	40	
VERY QUIET	30	MINIMUM NIGHTTIME LEVEL IN QUIET AREA SOFT WHISPER AT TEN FEET
JUST AUDIBLE UNDER NORMAL CONDITIONS	20	SOFTLY RUSTLING LEAVES AT TEN FEET
	10	
THRESHOLD OF AUDIBILITY FOR YOUNG, HEALTHY EARS UNDER LAB CONDITIONS	0	

Table 1. TYPICAL NOISE LEVELS FOUND IN CALISTOGA

ROADWAY SEGMENT DESCRIPTION	Ldn CONTOUR DISTANCES FROM ROADWAY CENTERLINES (FEET)					
	----- EXISTING -----			----- FUTURE -----		
	55 dBA	60 dBA	65 dBA	55 dBA	60 dBA	65 dBA
=====						
LINCOLN AVENUE						
Foothill-Cedar	134	62	29	137	64	30
Cedar-Washington	143	66	31	141	65	31
Washington-Silverado	129	60	28	134	62	29
Silverado North	323	150	70	427	198	92
FOOTHILL BOULEVARD						
Dunaweal-Lincoln	285	132	61	287	133	62
Lincoln-Berry	261	121	56	297	138	64
Berry-Pet. Forest	261	121	56	306	142	66
Pet. Forest-Tubbs	204	95	44	207	96	45
SILVERADO TRAIL						
Dunaweal-Lincoln	209	97	45	283	131	61
WASHINGTON STREET						
Lincoln East	80	37	17	155	72	33
Lincoln-Berry	69	32	--	138	64	30
Berry-Lake	50	23	--	93	44	20
LAKE STREET						
Fair Way-Grant	48	22	--	86	40	19
BERRY STREET						
Foothill-Cedar	45	21	10	99	46	21
PETRIFIED FOREST						
Foothill South	181	84	39	222	103	48
=====						

Table 2. ROADWAY Ldn CONTOUR LOCATIONS. Noise exposures are not expected to be significant near roadway segments not listed.

	Ldn RANGE (dBA)			
	Below 55	55-60	60-65	65-70
Approximate percentage of the existing population with residences exposed to noise levels within the given range	92.1%	5.1%	2.3%	.5%
Approximate percentage of the future buildout population with residences exposed to noise levels within the given range	87.2%	8.9%	3.5%	.4%

Table 3. EXISTING AND FUTURE NOISE EXPOSURE INVENTORIES

CONTOUR Leq (dBA)	DISTANCE OF CONTOUR FROM WIND MACHINE (FEET)
90	126
85	224
80	400
75	710
70	1,125
65	1,782
60	2,518
55	3,170

Table 4. Leq CONTOUR LOCATIONS NEAR A TYPICAL WIND MACHINE





Figure 2. CALISTOGA SOARING CENTER Ldn CONTOURS. The contour locations are shown as dashed lines labeled in dBA.



Figure 3. SPRINT CAR RACE Leq CONTOUR:
Contour locations are indicated by
dashed lines labeled in dBA

IV GOALS, POLICIES AND STANDARDS

With regard to noise issues, the goals of the City of Calistoga are as follows:

1. Maintain the relatively quiet nature of the community
2. Protect the residents of Calistoga from the harmful and/or undesirable effects of excessive noise
3. Achieve and/or maintain noise exposure compatibility between neighboring land uses

The policies prescribed below shall be applied to attain Goals 1 - 3. Specific procedures for implementing the policies are given in Section V.

Policy A. EXTERIOR Ldn COMPATIBILITY

The standards in Table 5 shall be applied to evaluate the compatibility of various land uses with nearby noise sources.

Policy B. STATE NOISE INSULATION STANDARDS

Provisions in the California State Noise Insulation Standards (California Administrative Code, Title 24, Part 2) and the Uniform Building Code (Appendix Chapter 35), and updates thereof, shall be applied to proposed residential developments. The provisions include, but are not limited to, the following standards:

1. Ldn values shall not exceed 45 dBA inside habitable rooms of new multi-family dwellings (apartments, condominiums, hotels, motels, etc.).
2. Assemblies dividing units within multi-family dwellings shall have laboratory certified STC ratings of 50 or more (45 if field tested). In addition, floor/ceiling assemblies shall have laboratory certified IIC ratings of 50 or more (45 if field tested).

Policy C. INTERIOR Ldn COMPATIBILITY

Ldn values above 45 dBA shall be prohibited inside habitable rooms of all new dwellings.

State standards mandate this limit in connection with multi-family dwellings. Policy C extends the requirement to single family dwellings also.

Policy D. INTERIOR INTERMITTENT NOISE

Maximum interior intermittent noise levels higher than the limits given in Table 6 shall be considered excessive.

Policy E. NON-TRANSPORTATION NOISE

Non-transportation noise sources which are potentially intrusive shall be evaluated in terms of Leq values during selected 15 minute intervals. Each evaluation shall be based upon a comparison between the Leq due to the subject noise source and the ambient Leq existing at a similar time in the absence of the subject source. The comparison(s) shall be made at any location(s) where the subject noise may be considered intrusive.

Prior to the comparison, the Leq produced by the subject noise source shall be corrected for the character of the noise and other circumstances, as indicated Table 7. If the corrected Leq due to the subject source exceeds the ambient Leq by 5 dBA or more, then the noise due to the subject source shall be considered excessive.

In applying this standard, 15 minute ambient Leq values may be determined by acoustic measurements. In the absence of measurement data, ambient Leq values shall be assumed to be 45 dBA during daytime hours (7 AM to 10 PM) and 35 dBA during nighttime hours (10 PM to 7 AM).

Note: The 15 minute Leq standard given here implies that, under some circumstances, noise may be considered excessive even if the noise level associated with the subject source is lower than the ambient noise level. This reflects the fact that in some cases the character of the noise (impulses, humming, etc.) may produce an impact, even though the noise level is low.

Policy F. NOISE STUDIES OF RESIDENTIAL PROJECTS

A noise study shall be required in connection with all residential projects proposed in areas where Ldn values exceed 60 dBA according to the contours given in Table 2 and Figure 2.

Such studies are required by the California State Noise Insulation Standards in connection with multi-family dwellings. The present Noise Element extends this requirement to single family dwellings as well.

Policy G. DISCRETIONARY NOISE STUDIES

A noise study requirement shall also be considered when Ldn standards are met or inapplicable, but (1) a potentially intrusive noise source is proposed near a noise sensitive area, or (2) a noise sensitive land use is proposed near a potentially intrusive noise source.

Policy H. NOISE STUDY CONTENTS

Required noise studies shall be the responsibility of the project applicant, and shall be consistent the state guidelines for noise study reports[4]. Such studies shall be performed by a consultant qualified in the field by education and experience, and shall include the following:

1. A summary of noise data collected, and/or descriptions of the methodologies used to determine existing and expected noise levels and noise descriptors such as Leq and Ldn.
2. Figures or maps showing the locations of noise sources and noise sensitive areas.
3. A discussion of the impacts of existing and future (20 years hence) noise levels on the project and/or impacts due to the project on the surrounding area. The standards in this Noise Element shall form the basis for impact assessment.
4. Specifications of any noise mitigation measures recommended to provide compliance with the standards in this Noise Element.
5. A discussion of the expected effects of the mitigation measures.

Policy I. OTHER ENFORCEMENT AGENCIES

County, state and federal agencies shall be encouraged to actively enforce regulations dealing with noise. Examples: Federal Aviation Administration regulations regarding aircraft noise emissions, and California Vehicle Code regulations regarding motor vehicle noise emissions.

Policy J. CITY EQUIPMENT

Vehicles and other equipment operated by the city shall comply with all applicable noise performance standards. Noise output shall be a consideration in the purchase of any new equipment or vehicles.

Policy K. NOISE MITIGATION MEASURES

The City of Calistoga shall encourage development designers to minimize noise levels through such measures as the following:

1. Locate outdoor activity spaces in areas where noise levels are low. Such spaces include yards, patios and decks.
2. Locate and orient buildings to place noise sensitive indoor spaces in areas with low noise levels. Such spaces include living rooms and bedrooms.
3. Locate relatively non-noise sensitive structures to shield noise sensitive areas from noise sources. Commercial buildings and parking garages are examples of non-noise

sensitive structures. Noise sensitive areas include residences, parks, and hospitals.

4. Use berms, walls and setbacks to shield noise sensitive areas from noise sources.
5. Provide appropriate muffling devices or enclosures for new noise sources located near noise sensitive areas.

Policy L. NOISE ELEMENT UPDATES

The noise element shall be regularly reviewed and updated as needed to prevent inconsistencies between noise element provisions and current conditions or other city regulations.

Policy M. VARIANCES

Variances from city standards may be considered if other substantive concerns conflict with noise requirements. However, low noise levels are a high priority and variances will be granted only in extreme and/or unusual circumstances.

Variances from the California State Noise Insulation Standards shall not be permitted.

A comparison of existing noise levels with the standards contained in Policies A - M shows that compliance is not universal at present. For example, Table 3 indicates that about 2.8% of the present population resides in areas where Ldn's due to motor vehicle traffic are higher than the 60 dBA value considered "normally acceptable" according to the criteria in Table 5.

Figure 2 indicates that Ldn values due to operations at the Calistoga Soaring Center are generally below the "normally acceptable" limit for residential use on parcels which are near the center and within the city limits. The only exception is a strip of property adjacent to the northeast corner of the soaring center property. In areas where maximum intermittent noise levels due to tow planes are about 70 dBA (see Table 1), it is likely that interior intermittent noise levels comply with the limits given in Table 6. Immediately adjacent to the soaring center property line, this may not be the case.

According to Figure 3, Leq values due to sprint car races exceed the limits prescribed in Policy E above. This may be an illustration of a case where a variance is reasonable in light of the popularity or necessity of the special events in question.

Table 4 indicates that variances from the standards of Policy E may also be needed in connection with wind machines. In this case, it may be practical to waive the Policy E standards, but maintain the interior noise level standards given in Policies C and D. This procedure would permit relatively high exterior noise levels, but minimize interference with noise sensitive interior activities, such as sleep.

LAND USE CATEGORY	EXTERIOR Ldn (dBA)				
	Below 55	55-60	60-65	65-70	70-75
Residential Single and multiple family dwellings, including mobile homes, duplexes, apartments, condominiums, hotels and motels	++	+	o	-	—
Outdoor Public Facilities Neighborhood parks, playgrounds, (including school playgrounds), picnic areas, amphitheaters, golf courses, riding stables and trails, water recreation, cemeteries	++	+	o	-	—
Public Buildings School buildings, libraries, churches, hospitals, nursing homes, auditoriums, concert halls, sports arenas	++	++	+	o	-
Commercial Office buildings, retail, business and professional facilities	++	++	+	o	-
Industrial Manufacturing, utilities and agriculture facilities	++	++	++	+	o

INTERPRETATIONS

- ++ **Clearly Acceptable** The activities associated with the specified use can be carried out with virtually no interference from noise.
- + **Normally Acceptable** Occasional slight interference with outdoor activities may occur. Conventional structures will insure that interior Ldn values are compatible with indoor activities.
- o **Conditionally Acceptable** The indicated noise levels will cause moderate interference with outdoor activities, and with indoor activities when windows are open. New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made. Noise reduction features should be included in the project design which upgrade the environment to the "Normally Acceptable" category over a substantial portion of the project site.
- **Normally Unacceptable** Noise will create substantial interference with both outdoor and indoor activities. Noise intrusion on indoor activities can be mitigated with special noise insulating construction. New construction or development should be generally discouraged. If construction or development does proceed, noise mitigation measures should be required to upgrade the acoustic environment to approach the "Normally Acceptable" category with respect to exterior noise, and to insure that interior noise levels comply with the state noise insulation standards.
- **Clearly Unacceptable** Unacceptable noise intrusion upon land use activities will occur. Adequate structural noise insulation may not be practical in most cases. New construction or development should generally not be undertaken.

Table 5. LAND USE COMPATIBILITY STANDARDS. These limits are to be applied in accordance with Policy A of Section IV.

LAND USE	TYPICAL ACTIVITY TO REMAIN UNDISTURBED	MAXIMUM INTERIOR INTERMITTENT NOISE LEVEL (dBA)
Residential		
Single family dwellings	Daytime conversation at 5', normal voice	60
duplexes, apartments,	Nighttime conversation at 10', normal voice	55
condominiums, hotels and motels	Sleep	50
Public Facilities		
Concert Hall	Listening	25
Legitimate Theater	Listening	30
School Auditorium	Listening	35
Motion Picture Theater	Listening	45
Church Sanctuary	Listening	45
School Classroom	Speech communication at 20', raised voice	55
Library	Speech communication at 3', normal voice	55
School Laboratory	Speech communication at 6', normal voice	60
Commercial		
Offices, Conference Rooms	Speech communication at 12', normal voice	55
Staff Offices	Speech communication at 6', normal voice	60
Sales, Secretarial	Telephone use	65
Restaurants	Conversation at 4', normal voice	65
Markets, Retail Stores	Conversation at 4', normal voice	65
Industrial		
Laboratory	Speech communication at 6', normal voice	60
Machine Shop	Speech communication at 3', raised voice	75
Assembly, Construction	Speech communication at 2', raised voice	75

Table 6. MAXIMUM INTERIOR INTERMITTENT NOISE LEVELS DUE TO EXTERIOR NOISE SOURCES. These limits are to be applied as specified in Policy D of Section IV.

TYPE OF CORRECTION	CIRCUMSTANCES UNDER WHICH THE CORRECTION IS APPLICABLE	CORRECTION TO BE ADDED TO THE MEASURED OR PREDICTED 15 MINUTE Leq DUE TO A POTENTIALLY INTRUSIVE NOISE SOURCE (dBA)
Seasonal Corrections	Summer (or year-round operation)	0
	Winter only (or windows always closed)	-5
Corrections for Character of Noise	No tonal, impulsive or information content	0
	Tonal components present	+5
	Impulsive noise	+5
	Information content (e.g., speech, song lyrics)	+5
Correction for Previous Exposure and Community Attitudes	No prior experience with the subject noise	+5
	Some previous exposure to subject noise, but little effort made to control noise.	0
	No previous exposure, but community is aware that serious noise control efforts are being made	0
	Considerable previous exposure to subject noise, and noise maker has good relations with community	-5
	Community is aware that the subject noise source is very necessary, and will not operate indefinitely	-10

Table 7. CORRECTIONS TO NOISE LEVELS DUE TO POTENTIALLY INTRUSIVE NON-TRANSPORTATION NOISE SOURCES. These corrections are to be used in conjunction with the standards specified in Policy E of Section IV.

V IMPLEMENTATION PROGRAM

The procedures outlined below shall be followed by the agencies indicated in order to implement the policies in Section IV.

Procedure A. NOISE EXPOSURE EVALUATION

The City of Calistoga Planning Department shall evaluate all proposed projects for noise exposure in accordance with the flow chart in Figure 4.

Procedure B. NOISE PRODUCTION EVALUATION

The City of Calistoga Planning Department shall evaluate all proposed projects involving noise sources for noise production in accordance with the flow chart in Figure 5.

Procedure C. NOISE ORDINANCE

The City of Calistoga shall develop and enact a noise ordinance based upon the standards contained in this Noise Element.

Procedure D. ZONING ORDINANCE

The provisions of this Noise Element shall be incorporated into the city zoning ordinance.

Procedure E. PLAN CHECKS

The City of Calistoga Building Department shall develop procedures to check compliance of proposed buildings with the California State Noise Insulation Standards and noise-related provisions of the Uniform Building Code. Procedures shall also be implemented to check for consistency between building plans and any specifications for noise mitigation measures given in required noise studies.

Procedure F. NOISE MONITORING

The City of Calistoga Planning Department shall require post-project monitoring of noise levels when appropriate to determine whether the completed project is in compliance with Noise Element standards.

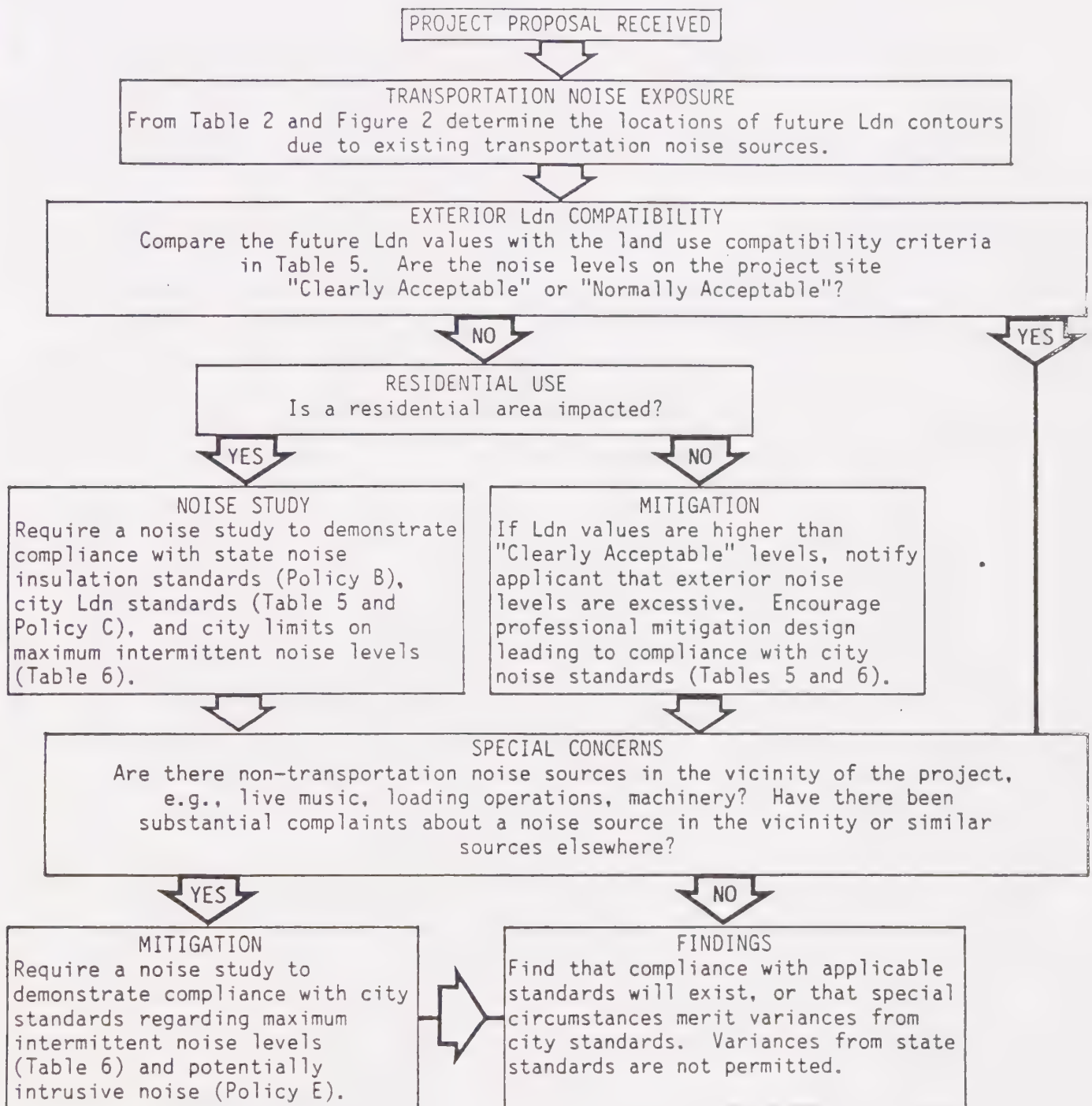


Figure 4. NOISE EXPOSURE EVALUATION PROCEDURE

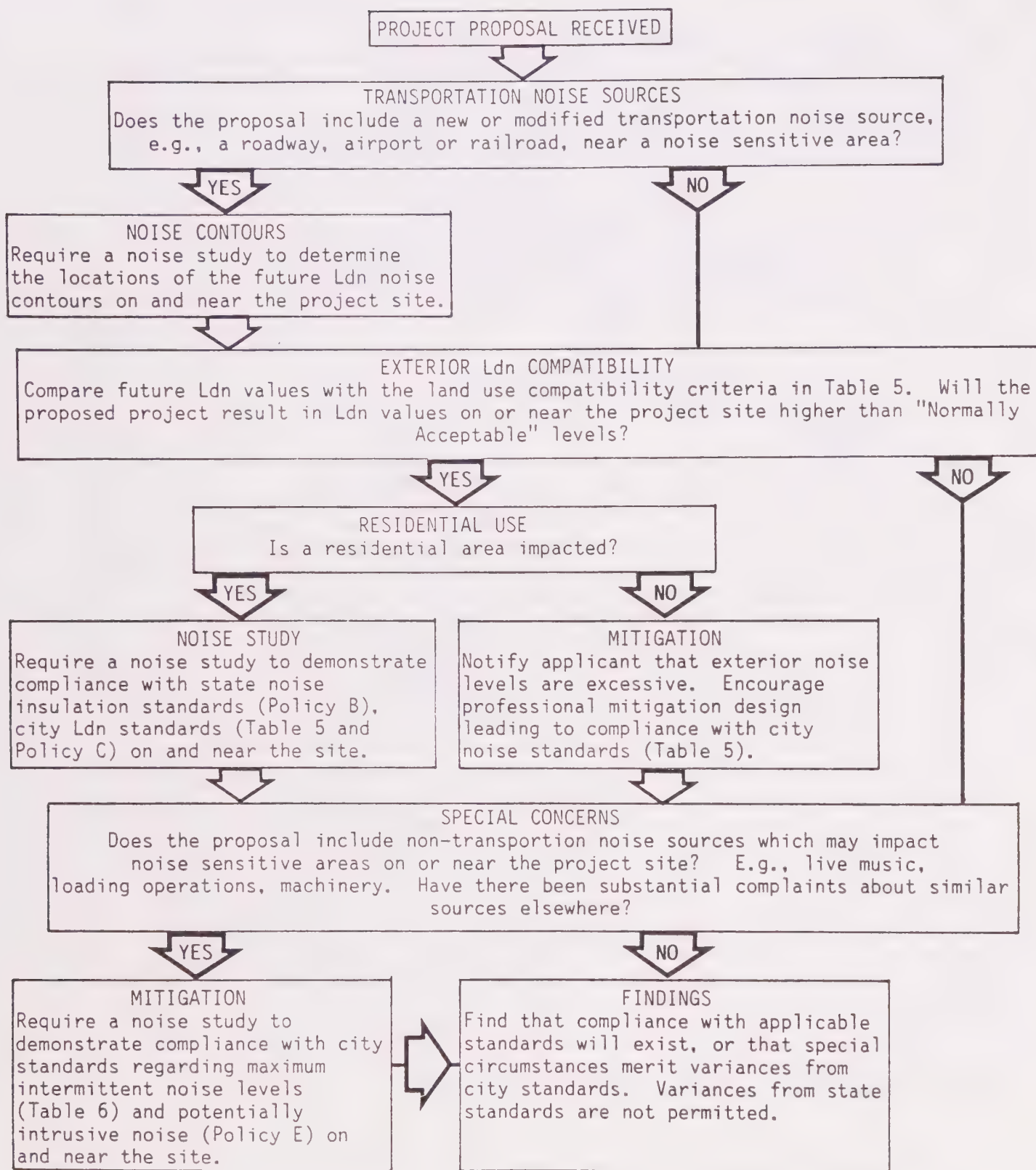


Figure 5. NOISE PRODUCTION EVALUATION PROCEDURE

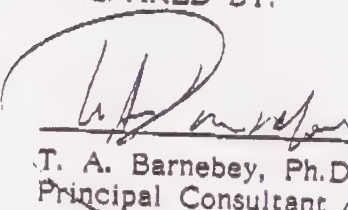
REFERENCES

1. "Draft Environmental Impact Report: Paul Coates Construction Inc. General Plan Amendment and Rezoning, SCH No. 87121504", Kreines & Kreines, March 1988
2. "Draft Environmental Impact Report: Destination Recreational Vehicle Resort, Calistoga", Thomas Reid Associates, March 1989
3. "Draft Environmental Impact Report For the Proposed La Casa Grande Resort Hotel", Earth Metrics Inc., April 1989
4. "Guidelines for Noise Study Reports as Part of Environmental Impact Reports", California Office of Noise Control, California Department of Health Services, May 1982

REPORT 1625/35B

Addendum to the Technical Supplement to the
NOISE ELEMENT OF THE CITY OF CALISTOGA GENERAL PLAN

PREPARED BY:



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1230 Pine Street
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10 July 1990

I INTRODUCTION

Tables 2 and 3 in the 1989 Technical Supplement to the Calistoga General Plan Noise Element[1] contain noise contours and a noise exposure inventory based upon traffic volumes estimated at that time. In May 1990, an updated traffic analysis[2] was prepared giving revised traffic volumes on some street segments. The revised traffic volumes imply modifications in the noise contour locations and exposure inventory figures. The new results are presented in this addendum.

The analysis leading to the previous noise exposure inventory included street segments not considered in the updated traffic analysis. In the present analysis, it has been assumed that the previous estimates are still valid in connection with these segments.

Tables 2 and 3 in Section II of this addendum replace Tables 2 and 3 in the 1989 Technical Supplement. All results are based upon the "mixed" general plan alternative discussed in the 1990 traffic analysis.

II REVISED TABLES

ROADWAY SEGMENT NO. AND DESCRIPTION[a]	Ldn CONTOUR DISTANCES FROM ROADWAY CENTERLINES (FEET)					
	----- EXISTING -----			----- FUTURE -----		
	55 dBA	60 dBA	65 dBA	55 dBA	60 dBA	65 dBA
LINCOLN N/O SILVERADO	323	150	70	427	198	92
SILVERADO E/O LINCOLN	209	97	46	283	131	61
PET. FOR. S/O FOOTHILL	181	84	39	222	103	48
1. EASTERN CROSSING	--	--	--	69	32	--
3. NEW SPARROW/LARK	--	--	--	85	40	--
4. NEW FAIR WAY	--	--	--	76	35	--
5. FOOTHILL E/O LINCOLN	285	132	61	347	161	75
6. FOOTHILL W/O LINCOLN	261	121	56	331	154	71
7. FOOTHILL W/O PFR	204	95	44	268	124	58
9. LINCOLN S/O WASHINGTON	143	66	31	163	76	35
10. WASHINGTON E/O LINCOLN	80	37	--	73	34	--
11. LINCOLN S/O SILVERADO	129	60	--	143	66	31
12. WASHINGTON W/O LINCOLN	69	32	--	84	39	--
13. NEW WASHINGTON EXT.	--	--	--	77	36	--
14. DUNAWEAL	[b]	[b]	[b]	262	122	56

- a. The numbers and descriptions of the numbered segments are drawn from Table 7 of the updated traffic study[2]. These include most of the segments considered in the Technical Supplement[1]. The unnumbered segments are those which have not been revised in the update. The data for the unnumbered segments is copied from Table 2 of the Technical Supplement.
- b. Existing traffic volumes are not available for Dunaweal Lane, so existing contour locations have not been calculated.

Table 2. ROADWAY Ldn CONTOUR LOCATIONS. Noise exposure contours are significant near those roadway segments not listed. "--" indicates that the indicated contours do not exist on the adjacent residential parcels.

	Ldn RANGE (dBA)			
	Below 55	55-60	60-65	65-70
Approximate percentage of the existing population with residences exposed to noise levels within the given range	90.6%	5.9%	3.0%	.5%
Approximate percentage of the future buildout population with residences exposed to noise levels within the given range	86.7%	10.0%	3.0%	.3%

Table 3. EXISTING AND FUTURE NOISE EXPOSURE INVENTORIES

REFERENCES

1. "Technical Supplement to the Noise Element of the City of Calistoga General Plan", Sound Solutions Report 1538R/29A/30A, Submitted to the City of Calistoga, 29 October 1989
2. "Traffic Analysis, Land-Use Options Assessment, General Plan Update, City of Calistoga, California", prepared for the City of Calistoga by Allan G. Tilton, P.E., Consulting Traffic Engineer, May 1990

VI. ENVIRONMENTAL REVIEW PROCESS AND
LAND USE PLAN COMPARISON

VI. ENVIRONMENTAL REVIEW PROCESS AND LAND USE PLAN COMPARISON

INTRODUCTION

This Final Environmental Impact Report (EIR) has been prepared in compliance with State CEQA Guidelines, Section 15161 as well as City of Calistoga environmental review procedures. This document provides an assessment of the proposed update of the City of Calistoga General Plan.

PROJECT LOCATION

The Study Area generally encompasses the City of Calistoga and small portions of land to the east, west, and northwest. The Study Area for the General Plan Update consists of approximately 3.43 square miles or 2,200 acres. Within this Study Area approximately 2.5 square miles or 1,600 acres are within the City limits.

PROJECT HISTORY

A Draft EIR for the proposed project was prepared and circulated for public review and comment on July 27, 1990. The Draft EIR examined the impacts associated with an update of the current General Plan of the City of Calistoga adopted March 15, 1977. The Draft EIR also examined three alternatives to the proposed project, including the "No-Project" alternative as required by CEQA (No Development, Development Under Existing General Plan, and Alternative Location), the Low Density/Intensity Alternative, and the High Density/Intensity Alternative.

In response to issues raised during Planning Commission meetings on the General Plan Update, revisions have been made to the proposed General Plan Update to include increased Rural Residential (RR), High Density Residential (HDR), Commercial (C), and Industrial (I) designations. Correspondingly, land designated for Medium Density Residential (MDR) and Planned Development (PD) were reduced. Airport square footage was also reduced. Additional review of these revisions have indicated that impacts and required mitigation are similar to the proposed project and that further analysis will not be required.

PROJECT DESCRIPTION

The proposed project is a General Plan Update of the current General Plan of the City of Calistoga adopted March 15, 1977. The Project Description in the Draft EIR accurately describes the general characteristics of the proposed project. Tables and Exhibits have been revised in this Final EIR to reflect the revisions to the proposed project.

LAND USE PLAN COMPARISON

Land Use

The Revised Land Use Plan calls for increases in Rural Residential, High Density Residential, Commercial and Industrial designations and decreases in Medium Density Residential and Planned Development designations. Correspondingly, acreage devoted to other designations was reduced. All revisions in designations are expected to be insignificant. The largest revision will be in increase in commercial uses near the airport. Commercial designation increases will not be significant as they will occur on land currently designated for airport uses. It is anticipated that all land use impacts and mitigation measures identified in the Draft EIR will remain the same. Please refer to Table A for a comparison of land use development potential under the two proposed plans. Exhibit 1 indicates the revised Land Use Plan. Table B indicates the revised Density and Intensity Standards.

Population

Implementation of the revised land use designations will not change projected population increases. Buildout according to the Revised Land Use Plan would add approximately 3,524 to the City population. No impacts or mitigation measures for population were identified in the Draft EIR. No additional impacts or mitigation measures have been identified for the revised Land Use Plan.

Housing

Development under the previously proposed Land Use Plan would allow for construction of 1,623 additional housing units in the City. This estimate is a "worst case" scenario assuming full build-out of the General Plan. Although full buildout was not anticipated under the previously proposed Land Use Plan, land use designation revisions encouraging greater densities and intensities may further encourage full build-out.

Under the previously proposed Land Use Plan the City would potentially not meet their fair-share housing allocation for the 1990-1995 period, assuming continuing infrastructure constraints. The revised Land Use Plan increases development potential for both commercial and residential. Buildout of commercial designations under the Revised Plan would generate additional housing demand, creating a housing shortfall of approximately 261 units. This figure represents a similar housing demand shortfall likely to occur under the previously proposed Land Use Plan. No changes in impacts or mitigation measures have been identified. Exhibit 2 shows the Adequate Housing Sites map with the revised designation boundaries.

TABLE A

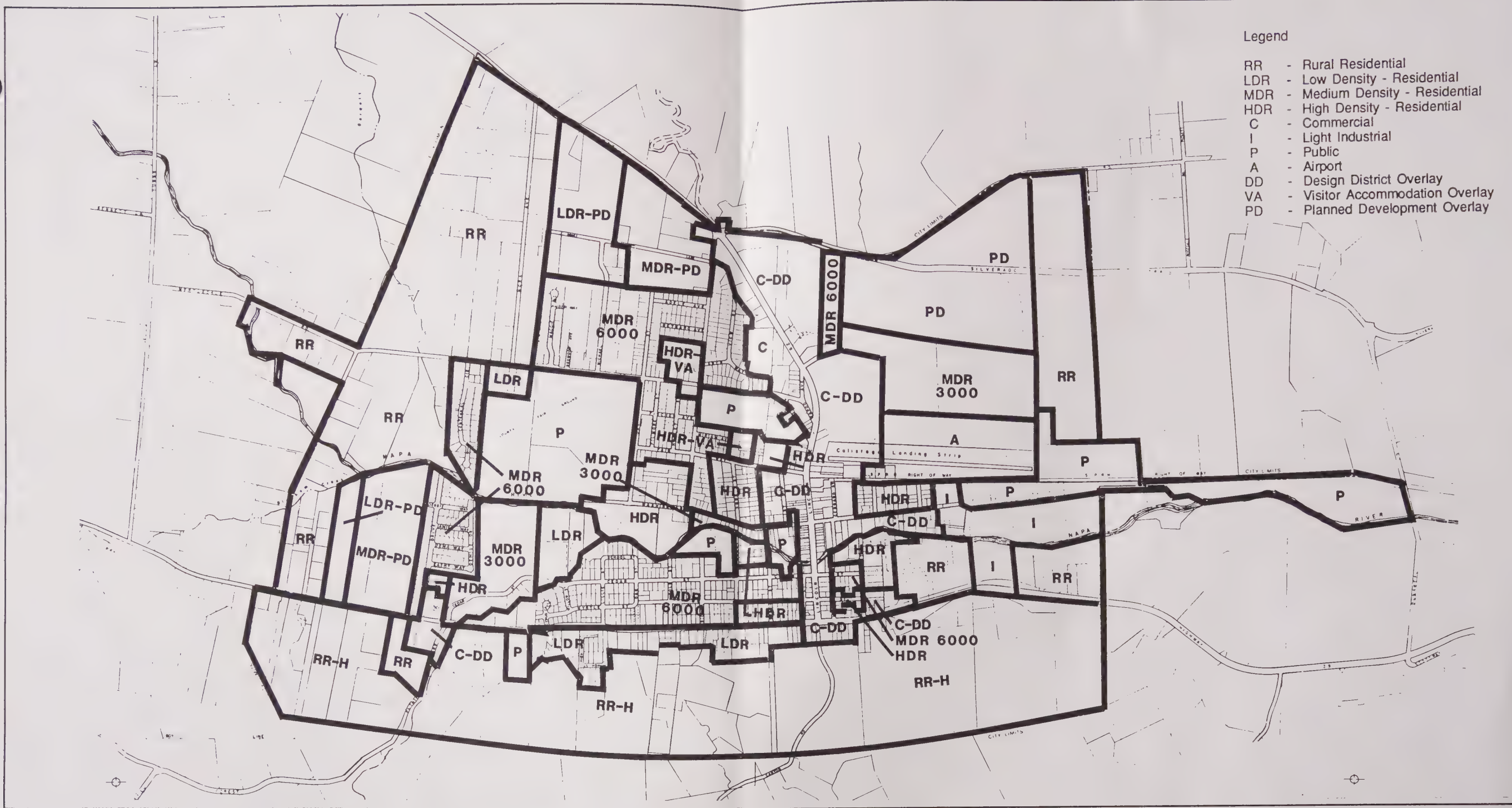
LAND USE PLAN DEVELOPMENT POTENTIAL

ZONE	# PARCELS		#HOUSING UNITS		COM. SQ. FT.		AC (NET)	
	Draft EIR ¹	P.C. ²	Draft EIR	P.C.	Draft EIR	P.C.	Draft EIR	P.C.
RR	108	110	509	533	--	--	399	423.26
LDR	17	17	106	106	--	--	28	28
MDR	100	66	615	581	--	--	98	91
HDR	22	50	259	348	60,000	60,000	17	22
C	37	47	--	--	716,810	976,810	27.5	41.2
I	2	3	--	--	373,750	519,240	6	9.34
PD	8	5	134	110	637,264	491,774	66.34	63.00
A	2	2	0	0	25,000	10,000	.5	.5
TOTALS	296	300	1,623	1,678	1,812,824	2,057,824	642.34	678.3

Sources: City of Calistoga
STA Planning, Inc.

Notes: ¹Draft EIR - Development potential identified in Draft EIR.

²P.C. - Revisions in development potential made by Planning Commission.

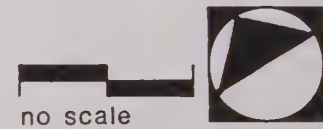


- Legend
- RR - Rural Residential
 - LDR - Low Density - Residential
 - MDR - Medium Density - Residential
 - HDR - High Density - Residential
 - C - Commercial
 - I - Light Industrial
 - P - Public
 - A - Airport
 - DD - Design District Overlay
 - VA - Visitor Accommodation Overlay
 - PD - Planned Development Overlay

Source: City of Calistoga



LAND USE PLAN GENERAL PLAN UPDATE ENVIRONMENTAL IMPACT REPORT City of Calistoga



no scale

Exhibit 1

TABLE B
DENSITY AND INTENSITY STANDARDS

DESIGNATION	USE	MAXIMUM DENSITY/INTENSITY
Residential Base:		
RR	see text	1 unit/20,000 s.f.
LDR	see text	1 unit/10,000 s.f.
MDR	see text	1 unit/3,000 s.f.
HDR	see text	1 unit/2,000 s.f.
Residential Combining:		
HR	see text	1 unit/40,000 s.f.
PD	see LDR, MDR, HDR	see LDR, MDR, HDR
Commercial Base:		
C	motels, hotels, inns, other commercial uses	1 unit/1,000 s.f. FAR .8 ¹
I	light industrial	FAR .9
Commercial Combining:		
VA	hotel, motel, inn, Bed and Breakfast	1 unit/1,000 s.f.
DD	see C district	same as C base district

Continued

¹Final City Council action on October 16, 1990 established a FAR range of .8 to 2.0. No change was made to Table A on page 3.

TABLE B (Cont.)

DENSITY AND INTENSITY STANDARDS

DESIGNATION	USE	MAXIMUM DENSITY/INTENSITY
A	other airport commercial uses	FAR .1
Public/Quasi Public Base:		
P	public/quasi public	FAR .8
Planned Development Base:		
PD	see text	see the following designations: RR LDR MDR HDR C-DD I

Source: City of Calistoga Planning Department

Notes:

To calculate population densities, the following procedure should be used:
household size (2.1) x maximum number of future dwelling units (1,678) =
3,524.

For the development land potential analysis, please refer to the revised MEA
and Issues and Options Document for assumptions and other build-out
calculations. The estimated number of future dwelling units reflects the
chosen land use plan of August/October, 1990.

Increases in High Density Residential (HDR) designations under the revised Land Use Plan will increase opportunities for housing density bonuses for the provision of low income housing. Use of density bonuses may serve to alleviate potential housing demand shortfalls.

Traffic and Circulation

Traffic and circulation impacts under the revised Land Use Plan are expected to be similar to impacts identified under the previously proposed plan. Level of service increases are expected to be similar and will be mitigated to a level of insignificance with the adoption of the Circulation Plan. The revised Land Use Plan is similar to the plan analyzed in the Draft EIR. As identified in the Traffic Analysis (Allan G. Tilton, 1990), only the High Intensity Alternative identified in the Draft EIR would significantly impact traffic levels of service.

It is anticipated that with increased commercial designations under the Revised Land Use Plan, parking shortfall within the downtown area will remain partially mitigated but significant. As stated in the Draft EIR, additional mitigation measures will be addressed in site-specific plans. Impacts to public transportation, bicycle and pedestrian, and air transportation are expected to be similar to the previously proposed land use plan. The revised Circulation Plan is shown in Exhibit 3.

Air Quality

No significant increases in air quality impacts are anticipated under the Revised Land Use Plan. Although increases in commercial designations may increase vehicular emissions, these increases are not expected to be significant. Short-term impacts due to project construction are expected to be similar under the Revised Land Use Plan. No changes to impacts or mitigation measures were identified.

Noise

No significant increases in noise impacts are anticipated under the Revised Land Use Plan. Although minor increases in roadway use may occur, these increases are not expected to be significant. Noise impacts due to short-term construction, the Calistoga Soaring Center, Sprint Car Races at the Napa County Fairgrounds, and the Wind Machine are expected to be similar as those identified under the previously proposed Land Use Plan. No additional mitigation measures have been identified.

Biological Resources

Similar impacts to vegetation, wildlife, and threatened and endangered species will occur under the Revised Land Use Plan as were identified under the previously proposed plan.

REALIGN INTERSECTION
PETRIFIED - CEDAR

SIGNAL

PETRIFIED
FOREST RD

1

NEW STREET

OAK

BERRY

FAIRMAY

LINCOLN

BRANNON

BUREAU TRAIL

DUNHALL

GREENDOOD

NEW STREET

MORA

MONEY

LAKE

RE-ALIGN
STREET
SIGNAL

2

3

SIGNAL

10

FOOTBALL

SIGNAL

NEW STREET

8

5

9

SIGNAL

NEW STREET

WASHINGTON

KEY

LOCAL STREETS

COLLECTOR STREETS

ARTERIAL STREETS



GENERAL PLAN CIRCULATION PLAN

GENERAL PLAN UPDATE
ENVIRONMENTAL IMPACT REPORT
City of Calistoga

no scale



Exhibit 3



The change in land use designation from airport (A) to commercial on a portion of the existing airport under the revised plan may impact the Calistoga Popcorn Flower and Napa Bluegrass. Any future development in this area will require discretionary review and a biological study. This will mitigate any impacts to a level of insignificance.

Public Services and Utilities

Development under the Revised Land Use Plan will require increases in staff and facilities similar to those required under the previously proposed Land Use Plan. Although further development will require additional water resources to be identified, it is anticipated that conservation programs in conjunction with the identification and utilization of other water sources will similarly reduce impacts to a level of insignificance. No additional impacts or required mitigation measures have been identified. Please refer to Table B for a comparison of service requirements for the previously proposed and revised Land Use Plans.

TABLE C
SELECTED PUBLIC SERVICES AND UTILITIES

	EXISTING	Draft EIR ¹	ADDITIONAL Planning Commission ²	Draft EIR	TOTAL Planning Commission
City Services:					
Fire (staff)	31	7	8	38	39
Police (staff)	12	7	8	19	20
Water (acre feet per year)	810.54	945	1,013	1,755.54	1,824
Wastewater (mgd)	.620	.690	.742	1.31	1.362
Schools (students)	638	864	891	1,502	1,529
Parks (acres)	14	18	18	32	32

Source: STA Planning, Inc.

Notes: ¹Draft EIR - Future demands as identified in the Draft EIR.

²Planning Commission - Revised future demands as identified by Planning Commission.

VII. MITIGATION MONITORING PROGRAM

VII. MITIGATION MONITORING PROGRAM

INTRODUCTION

The development of a Mitigation Monitoring Program (MMP) is in accordance with Section 21081.6 of the Public Resources Code. The purpose of the Mitigation Monitoring Program is to ensure that proposed mitigation measures included in environmental documentation will extend beyond the pages of the document and are implemented to reduce or eliminate significant detrimental project-related impacts to the environment. The Mitigation Monitoring Program (MMP) will be approved as part of the General Plan Update project by the City of Calistoga.

The following Mitigation Monitoring Program (MMP) has been specifically tailored to the City of Calistoga General Plan Update. As such these general mitigation measures from this tiered EIR must be incorporated into site-specific environmental documentation and their mitigation monitoring programs.

After completion of the Draft EIR, the City Planning Commission made minor changes to the project analyzed in the Draft EIR. As described in the comparative analysis, overall conclusions were not altered by these changes. No additional significant unavoidable or partially mitigable impacts were identified in the comparative analysis. No additional mitigation measures have been added.

The following contains a survey of insignificant impacts, a summary of mitigation measures, and a checklist to guide the implementation of mitigation measures. Please refer to the Environmental Review Process Section of this Final EIR for a project description.

ORGANIZATION AND FORMAT

The MMP has been developed as a stand-alone document. It contains a Summary of Impacts and a Reference Checklist.

SUMMARY OF INSIGNIFICANT IMPACTS

Initial Study

The following briefly describes those effects determined to be insignificant prior to the preparation of the environmental document. The following issues were indicated as having "no impact" in the Initial Study.

1. Implementation of the General Plan will not significantly alter air movement, moisture, or temperature, or any change in climate either locally or regionally.

5. Implementation of the General Plan may cause an increase in wind or water erosion of soils, either on or off the site.
6. Implementation of the General Plan may increase wind or water erosion of soil, either on or off the site.
7. Implementation of the General plan may result in changes in deposition or erosion of beach sands, or changes in siltation, deposition, or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet, or lake.
8. Implementation of the General Plan may expose people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards.

Water

9. Implementation of the General Plan will change absorption rates, drainage patterns, or the rate and amount of surface runoff.
10. Implementation of the General Plan may alter the course or flow of flood waters.
11. Implementation of the General Plan may change the amount of surface water in a water body.
12. Implementation of the General Plan may result in discharge into surface water, or in alterations of surface water quality, including but not limited to temperature, dissolved oxygen, or turbidity.
13. Implementation of the General Plan may alter the direction or rate of the flow of ground waters.
14. Implementation of the General Plan may change the quantity of ground waters, either through direct additions or withdrawals, or through the interception of an aquifer by cuts or excavations.
15. Implementation of the General Plan may expose people or property to water related hazards such as flooding or tidal waves.

Light and Glare

16. Implementation of the General Plan may produce new light or glare.

Risk of Upset

17. Implementation of the General Plan may involve the risk of an explosion or the release of hazardous substances in the event of an accident or upset conditions.

Human Health

18. Implementation of the General Plan may create a health hazard or potential health hazard.
19. Implementation of the General Plan may expose people to potential health hazards.

Aesthetics

20. Implementation of the General Plan may obstruct a scenic vista or view open to the public, or may create an aesthetically offensive site open to public view.

Cultural Resources

21. Implementation of the General Plan may alter or destroy a prehistoric or historic archeological site.
22. Implementation of the General Plan may have an adverse physical or aesthetic effect on the prehistoric or historic building, structure, or object.
23. Implementation of the General Plan may have the potential to cause a physical change which would affect unique ethnic cultural values.
24. Implementation of the General Plan may restrict existing religious or sacred uses within the potential impact area.

SUMMARY OF IMPACTS MITIGATED TO A LEVEL OF INSIGNIFICANCE

Impacts associated with the following environmental issues will be mitigated to level of insignificance upon adherence to existing City policies and implementation of the project's mitigation measures.

Land Use

1. The incompatibility of adjacent commercial and residential land use can be mitigated to a level of insignificance.
2. The General Plan will have an impact on the Zoning Code.

3. Implementation of the General Plan will have an impact on the Resource Management System of the City of Calistoga.
4. Implementation of the General Plan may create land use impacts by initiating or expanding upon plans and programs that relate to land use, including an Urban Design Study, Construction of Public Facilities, Hillside Management Ordinance, and designation of a scenic highway corridor.

Housing

5. Existing infrastructure constraints may impact the City's ability to meet its fair share housing allocations for 1990-95.
6. Implementation of the General Plan may impact the availability of dwelling units for future employees, creating a project-specific and cumulative jobs/housing imbalance.
7. Implementation of the General Plan may impact the availability of affordable housing for low and moderate income households, affecting, in particular, special needs groups such as the elderly, farmworkers, the handicapped, large families, and single-parent households.

Traffic and Circulation

8. Implementation of the General Plan will impact traffic volume and levels of service.
9. Implementation of the General Plan will impact bicycle and pedestrian facilities.

Air Quality

10. Project construction activities will temporarily impact air quality.
11. Implementation of the General Plan will have a long term impact on pollutant emissions.

Noise

12. Implementation of the General Plan, in conjunction with past, present, and reasonably foreseeable future projects, will have an incremental impact.

Biological Resources

13. Designation of previous airport uses as commercial may impact the Calistoga popcorn flower and Napa bluegrass.
14. Development according to proposed land use designations may impact native and riparian vegetation.
15. Disturbance impacts to any riparian or woodland habitats will be mitigated to a level of insignificance.
16. Disturbance impacts to peregrine and prairie falcon habitat along waterways are mitigated to a level of insignificance.

Public Services and Utilities

17. Implementation of the General Plan will impact the ability of fire service staff and facilities to meet demands on fire protection
18. Implementation of the General Plan will impact the ability of the police staff and facilities to meet demands for police protection.
19. Implementation of the General Plan will impact the supply of water for the City.
20. Implementation of the General Plan will impact the level of service and infrastructure for wastewater services.
21. Implementation of the General Plan will impact the City's storm drain system.
22. Implementation of the General Plan will impact solid waste services if the proposed expansion of the Cloverflat landfill is not approved.
23. Implementation of the General Plan will impact the Calistoga School District as a result of increased enrollment due to population growth.
24. Implementation of the General Plan will impact library services provided by Napa City/County Library.
25. Implementation of the General Plan will impact the ability of existing parkland to meet future park use demand.
26. Implementation of the proposed project will impact administrative services and Community Center facilities.

SUMMARY OF SIGNIFICANT IMPACTS WHICH CAN BE PARTIALLY MITIGATED

Traffic and Circulation

1. Implementation of the proposed project will impact the current parking shortfall by increasing parking demand.
2. Implementation of the General Plan, in conjunction with other past, present, and reasonably foreseeable/future projects will have a cumulative impact on regional traffic and circulation.

Air Quality

3. Implementation of the General Plan, in conjunction with other General Plans within the Bay Area Air Quality Management District, will have a cumulative impact on air quality in the region.

Noise

4. Future project developments will result in significant roadway impacts on Silverado Trail, Washington Street, Lake Street, and Berry Street.
5. Noise impacts as a result of sprint car races at the Napa County Fairgrounds are expected to result in significant impacts.

Biological Resources

6. Buildout of the proposed project in conjunction with past, present, and reasonably foreseeable development will have an incremental impact on native vegetation, wildlife, and threatened and endangered species.

SUMMARY OF MITIGATION MEASURES

Land Use

1. The City shall amend the Zoning Code to ensure that proposed commercial development abutting residential uses provides for ample building setbacks and buffering.
2. The City shall amend the Zoning Code to require multi-family structures located adjacent to single-family parcels to incorporate adequate screening into project design to prevent view intrusion.

3. The City shall amend the Zoning Code to avoid incompatible building heights.
4. The City shall prioritize development on infill parcels with existing public services and utilities.
5. The City shall discourage General Plan Amendment that affect the balance of land uses such as uses which would create a jobs/housing imbalance.
6. The City shall amend the Zoning Code to protect the integrity of residential neighborhoods by restricting non-residential uses.
7. The City shall petition LAFCO to expand its Sphere of Influence to include the Study Area.
8. The City shall ensure that the Zoning Code prohibits tourist-based business outside the downtown area.
9. The City shall locate neighborhood commercial within easy access to future residential developments.
10. The City shall amend its Zoning and Subdivision Codes to allow for adequate landscaping in non-residential areas.
11. The City shall prepare an urban design study to coordinate the development of pedestrian amenities and the character of the downtown area. The study will include:
 - Parking design and location
 - Street tree theme
 - Lighting
 - Street furniture
 - Building scale, bulk, and facade treatment
 - Sign regulations
 - Landscape standards
12. The City shall designate sufficient land only to increase visitor accommodations in order to encourage visitors to stay overnight.
13. Through a revised Resource Management System Ordinance, the City shall monitor new development to ensure the adequate provision of water and wastewater services.

14. Through its corporate powers the City shall provide for the construction of the following facilities:
 - a new police facility
 - an additional fire substation on the west side of Calistoga
 - an upgraded and expanded library
 - a public swimming pool for school and recreation
 - a senior citizen center
 - new school site as population levels warrant
 - a youth recreation center
15. The City shall ensure that new development is phased concurrently with planned infrastructure expansions.
16. The City shall retain areas for visual amenities through development controls to protect the ridgeline and provide for site and design review of all development proposals.
17. Through site and design review, the City shall ensure that proposed development shall not be visible from the valley floor. The appearance of rows of houses along the skyline shall be avoided.
18. The City shall prepare a hillside management ordinance that will address:
 - development location
 - grading
 - revegetation and landscaping
 - light and glare
19. Through the environmental review process, the City shall analyze areas of ecological sensitivity in relation to proposed development.
20. The City shall prepare an Urban Design Plan for selected entrances to the City and the downtown core area.
21. The City, in conjunction with the County of Napa, shall obtain official designation of Highways 29 and 128, Petrified Forest Road, and the Silverado Trail as Official State Scenic Highways.
22. Using citizens input, the City shall develop guidelines for each proposed scenic route corridor as required by the state, including guidelines for land use, site planning, outdoor advertising, landscaping, earth moving, and design.

23. The City shall develop Zoning Code provisions to require that new development at the major entrances to the City be aesthetically pleasing in design, provide buffering between land uses, and retain open space and unique land features.
24. The City shall establish a scenic highway overlay in the Zoning Code to ensure development retains scenic vistas along Silverado Trail, Petrified Forest Road, State Highway 128 between the western City limits and Petrified Forest Road, and Lake County Highway.
25. The City shall coordinate with the operators of the Napa Valley Wine Train to extend the service to Calistoga subsequent to environmental analysis.
26. Through the environmental review process, the City shall analyze County-proposed developments for compatibility with adjacent City uses.

Housing

27. Through corporate and police powers, the City shall make every effort to meet its fair share of housing as determined by ABAG.
28. The City shall make use of governmental programs related to construction and rehabilitation needs of low and moderate income households. The City shall apply for and/or make applications available to the public. Funding sources include, but are not limited to:

FEDERAL (FmHA)

- FmHA Section 502 - Rural Housing Home Improvement Loan Program. Provides loans to low income households to buy, build, improve, repair, or rehabilitate owner-occupied rural homes.
- Section 504 - Rural Housing Repairs Program. Provides loans and grants to very low income persons to make repairs necessary for health and safety.
- Section 523 - Self-Help Housing. Provides grants and loans to fund technical assistance to groups building units financed under 502.
- Section 523/524 - Rural Housing Sites Loan Program. Provides direct loans to private or public non-profit organizations to acquire and develop land in rural areas.

STATE

- California Self Help Housing Program. Through grants and loans to local governments and non-profit organizations, this program helps low and moderate income families construct or rehabilitate their homes.
- Predevelopment Loan Program. Low interest loans to local governments and non-profit organizations for predevelopment activities.
- Nonprofit Housing Program. The California Housing Finance Agency (CHFA) provides permanent financing for contractor-built single-family homes developed by nonprofit organizations which serve lower income families.
- Minority and Small Business Development. CHFA assists minority-owned and women-owned developers.

LOCAL

- Inclusionary Housing Program. All new residential units - five or more are required to address affordable housing through providing 10% of the units as affordable to very low, low, and moderate income households, land dedication, in-lieu fee, or reasonable alternative method.
 - Make use of repayment funds from C.D.B.G. Rehabilitation board to facilitate retention, repair, and development of affordable housing units.
29. The City shall ensure that all rental property owners allow the use of Section 8 rental assistance certificates.
 30. The City shall amend the Zoning Code to grant residential density use bonuses for very low and/or low income in order to comply with Governmental Code Sections 65913.4, 65915, and 65917.
 31. The City shall continue to implement the provisions of the Second Dwelling Units Chapter (17.37) of the City Zoning Code.
 32. The City shall keep a list of all available and appropriate federal, state, and local funding sources that support rental housing units. The City shall apply and/or provide applications to the following programs:

FEDERAL (FmHA)

- Section 515 - Rural Rental Housing Program. Provides loans to construct and rehabilitate rental and cooperative housing for low and moderate income families and elderly persons.

STATE

- Rental Housing Construction Program. Provides loans to local governments for the development of rental housing.
- The City shall apply for Proposition 77 and 84 funds for rehabilitation and construction of rental units.

LOCAL

- Inclusionary Housing Program. All new residential units - five or more are required to address affordable housing through providing 10% of the units as affordable to very low and low income households, land dedication, in-lieu fee, or reasonable alternative method.
33. The City shall encourage mixed-use development through its Zoning Ordinance.
 34. The City shall establish a housing impact fee for new businesses to help house employees for low-salaried positions.
 35. The City shall keep a list of all available state and regional programs that support housing for special need groups. The City shall apply and/or provide applications to the public. The City shall work with HCD and apply for the following programs:
 - Emergency Shelter Program - Awards grants to local governments and non-profit organizations for actively aiding the homeless.
 - Senior Citizens Shared Housing Program - Provides grants to local governments and non-profit organizations helping seniors find others with whom they can share housing.
 - Office of Migrant Services - Awards grants to local governments for administration, management, operation, and rehabilitation of rental housing units for migrant families.

- Farm Labor Housing Rehabilitation Loan Program - Provides loans to the owners of farm labor housing to bring it into compliance with the Employers Housing Act.
 - Housing Assistance Program - Provides Section 8 certificates to developmentally, mentally, and physically disabled adults. The Napa Valley Housing Authority distributes Section 8 rental certificates.
36. The City, alone or in conjunction with the County, shall investigate California Debt Limit Allocation Committee requirements for issuance of tax-exempt Mortgage Revenue Bonds (MRBs). If feasible, the City and/or County shall apply to the Committee for allocation of MRBs.
 37. The City shall provide information to developers and the public regarding the California Housing Finance Agency's (CHFA) bond financing program.
 38. The City, alone or in conjunction with the County, shall contact the California Debt Advisory Commission and investigate requirements to obtain authority for the issuance of Mortgage Credit Certificates (MCCs). The City and/or County shall work with local and real estate agencies and lenders to implement a MCC program.
 39. The City shall rezone a significant amount of land designated by the Zoning Code for Transitional uses to residential uses. Through the Zoning Code, the City shall allow limited residential units in commercial districts provided it can be done in a compatible manner.
 40. The City shall consider rezoning lands designated for commercial and industrial uses with mixed uses in order to accommodate projected housing needs.
 41. In accordance with Section 65852.3 and 65852.4 of the Government Code, the City shall revise its Zoning Code to allow manufactured homes in single-family zones.
 42. In accordance with Sections 65852.7 of the Government Code, the City shall amend its Zoning Code to allow mobilehome parks on all land planned and zoned for residential uses.
 43. In accordance with Section 65583(c)(1) of the Government Code, the City shall amend its Zoning Code to provide for the possibility of emergency and transitional shelters, should the need occur. Potential sites are shown on the Adequate Sites Map.

44. The City shall maintain a list that provides information on approved and proposed projects, especially projects which include rental housing. This list shall be made available to the public.
45. The City shall designate a housing coordinator to work with the Planning Department and/or with the City Administrator. Responsibilities of the Housing coordinator shall include, but are not limited to, developing a pilot program to package housing incentives and funding sources aimed at developing affordable housing, farmworker housing, emergency shelters, and other types of housing. The coordinator shall also make recommendations for use of the City's CDBG repayments funds to the City Council.
46. The City shall review its Capital Improvement Program annually to ensure that sewer/water/street improvements facilitate timely residential development.
47. The City shall review previous redevelopment studies and consider encouraging the formation of a special assessment district in the "lower Washington" area. Funds from the assessment could fund long-term rehabilitation and property upgrading programs for existing properties and structures.

- OR -

The City shall reinitiate efforts to prepare and implement a redevelopment plan for the "lower Washington area" of Calistoga, if feasible. The plan will consider replacing older multi-family units with new multi-family units for very low to low income households.

48. The City shall make use of governmental programs listed in Implementing Program 3 under Goal A of the Housing Element. In addition, the City shall apply for and/or provide applications for the following programs:

FEDERAL (FmHA)

- 533 - Rural Preservation Grant Program. Funds non-profit organizations to rehabilitate older rural homes for very low and low income families.

STATE

- Special User Housing Rehabilitation Program. Offers loans for rehabilitating residential, hotels, and other housing occupied by the elderly, disabled, and low income persons.

- Deferred Payment Rehabilitation Loan Program. Provides loans to local governments to assist with the rehabilitation of housing for low and moderate income households.
49. The City shall annually update its Capital Improvements Plan to ensure that municipal systems are in good repair.
 50. The City shall continue to enforce the provisions of the City Municipal Code and resolutions in order to maintain existing mobilehome parks.
 51. The City shall amend the Zoning Code to be consistent with the General Plan Land Use Plan (diagram).
 52. The City shall review all loan agreements for housing assistance to ensure clauses are included which require unit owners to retain the families that occupied the units prior to rehabilitation, unless adequate cause can be shown.
 53. The City shall amend their Zoning Code to regulate the placement of Bed and Breakfast establishments in residential neighborhoods. The amendment shall regulate minimum spacing and location next to local streets to prevent the proliferation of nonresidential uses in residential neighborhoods.
 54. The City shall enact an ordinance requiring loan recipients to give one-year advance notice to the City of potential conversions to market rate units.
 55. Through its Inclusionary Housing Program, the City shall assist non-profit housing corporations in purchasing subsidy termination units.
 56. The City shall amend its Subdivision Ordinance and Zoning Ordinance to comply with the State Subdivision Map Act.
 57. The City shall implement a fast-track application procedure for projects that include residential development, especially projects that include affordable housing.
 58. The City shall continue to reduce, waive, or allow deferred payments of Resource Management System fees for second units, senior housing, and very low to low income housing projects.
 59. The City shall promote higher density and infill development.

Traffic and Circulation

60. The City shall develop their circulation system according to the Circulation Plan and diagrams.
61. Through the Capital Improvements Plan and related impact fees, the City shall ensure that adequate funds are provided to upgrade and maintain the existing circulation network.
62. The City, in conjunction with other municipalities, shall discuss possibilities of providing transportation services to citizens of Calistoga and the rest of the Napa Valley, including the possibility of utilizing designated cars on the Napa Valley Wine Train, a regional public bus system, or other forms of regional transportation.
63. Through the environmental review process, the City shall require proposed developments to include appropriate site planning techniques which minimize traffic impacts, and to provide necessary street improvements.
64. The City shall improve directional signing systems to help guide visitors to their destinations.
65. The City shall develop a benefit assessment district or a similar mechanism to assist in the funding of parking lot construction to meet local and tourist demands.
66. The City shall review parking facilities as part of the design review process for new or expanded development projects.
67. The City shall require repair and/or construction of sidewalks on all residential, collector and arterial streets.
68. The City shall prepare an urban design study to coordinate the development of pedestrian amenities and the character of the downtown area. The study will include:
 - Parking design and location
 - Street tree theme
 - Lighting
 - Street furniture
 - Building scale, bulk, and facade treatment
 - Sign regulations
 - Landscape standards

Air Quality

69. The City shall implement improvements recommended in the MEA and in the Circulation Element of the General Plan. Special attention shall be given to improvements related to pedestrian and bicycle usage.
70. The City shall review all development proposals for short-term and long-term impacts to air quality.
71. The City shall support the Bay Area Air Quality Management District, and implement reasonable and feasible new regulations related to the improvements of air quality.

Noise

72. The City shall develop a comprehensive noise ordinance incorporating the provisions contained in the Technical Supplement to the Noise Element of the City of Calistoga General Plan prepared by Sound Solutions on October 23, 1989.
73. The provisions of the Noise Element and accompanying Technical Supplement shall be incorporated into the City Zoning Code.
74. The City Planning Department shall evaluate all proposed projects for noise exposure in accordance with the flow chart in Figure 4 in the Technical Supplement to the Noise Element of the City of Calistoga General Plan prepared by Sound Solutions on October 23, 1989.
75. The City Planning Department shall evaluate all proposed projects involving noise sources for noise production in accordance with the flow chart in Figure 5 in the Technical Supplement to the Noise Element of the City of Calistoga General Plan prepared by Sound Solutions on October 23, 1989.
76. The City Building Department shall develop procedures to check compliance of proposed buildings with the California State Noise Insulation Standards and noise-related provisions of the Uniform Building Code. Procedures shall also be implemented to check for consistency between building plans and any specifications for noise mitigation measures given in required noise studies.
77. The City Planning Department shall require post-project monitoring of noise levels when appropriate to determine whether the completed project is in compliance with Noise Element standards.

78. The City shall review and comment on documents of a regional nature that pertain to noise.
79. The City shall implement all recommended improvements related to bicycle and pedestrian paths as stated in the Circulation Element.

Biological Resources

80. Due to the presence of endangered species, the City shall require all work associated with wetlands to complete botanical surveys and obtain environmental review prior to any modifications.
81. The City shall ensure that all waterways are managed as coherent ecological systems. All undeveloped waterways shall be buffered to prevent development and encroachment as follows:
 - a. For minor tributaries, a minimum of 30-foot setbacks shall be required from the top of the high bank.
 - b. For the Napa River, a minimum setback of 30 feet from the top of the high bank shall be limited to access for maintenance, erosion control, and pedestrian/bicycle pathways.
 - c. Within setback zones, cross fences shall not be allowed, and the zones shall not be used for alternative purposes including, livestock grazing, lawn clippings, or trash disposal.
 - d. The City shall prepare a study analyzing the feasibility of placing riparian vegetation corridors and linear parks in wetland sinks located along water courses, geothermal marshes and seasonal creeks in the City.
82. The City shall prepare an amendment to the Tree Preservation Ordinance specifically addressing the City's oak and historic trees.
83. Through the environmental review process, the City shall require a study of native habitats and biological resources where appropriate by a qualified biologist prior to development.
84. The City shall protect watercourses and watersheds as follows:
 - a. Development proposed in erosion-prone areas shall be required to include a soils and hydrological analysis for environmental review.

- b. The City shall review all County policies and development proposals in watersheds. The City shall encourage the County through the environmental review process to protect watersheds.
 - c. The City shall investigate methods to improve water quality to enhance fisheries and public use.
 - d. The City shall seek Urban Stream Restoration grant funds to help bank stability and improve water quality.
85. The City encourages the use of Mt. Washington and Mt. Lincoln, Oat Hill Trail Road, and other recreational areas for low intensive uses such as: bicycle and hiking trails, educational signage, benches and fencing in accordance with the Land Use Element.
86. The City shall ensure that all waterways are buffered to prevent development and reserve the Open Space associated with rivers and streams in Calistoga.
87. In conjunction with site review or use permit approval, the City shall require a detailed grading and landscaping plan for new developments. The plan shall be reviewed by the Planning Development for its treatment of hillsides, forest lands, sensitive areas, viewsheds, and other aesthetic features.
88. The City shall prepare hillside design guidelines and zoning controls to protect slope stability, minimize soil erosion, preserve natural vegetation and scenic vistas.

Public Services and Utilities

89. The City will prioritize development on infill parcels with existing public services and utilities.
90. Through a revised Resource Management System Ordinance the City shall monitor new development to ensure the adequate provision of water and wastewater services.
91. Through its corporate powers the City shall provide for the construction of the following facilities:
- a new police facility
 - an additional fire substation on the west side of Calistoga
 - an upgraded and expanded library

- a public swimming pool for school and recreation
 - a senior citizen center
 - new school site as population levels warrant
 - a youth recreation center
 - City administrative services
92. The City shall provide adequate levels of staffing for all new facilities.
93. The City shall ensure that new development is phased concurrently with planned infrastructure expansions.
94. Through the Resource Management System and environmental review process, the City shall coordinate public utility provision with land development.
95. The Public Works Department shall prepare a water enhancement plan. The following sources of water, among others, will be investigated:
- a. NBA Contract Negotiation - Open discussions with the Napa County Conservation District and City of Napa regarding increase in NBA allocations or direct long term purchase of additional water.
 - b. Fiege Canyon Well Field - Investigate increasing production of existing wells and the potential for developing additional wells.
 - c. Flynnville wells - Open discussions with existing owners for testing and possible access or acquisition potential.
 - d. Pacheteau Wellsite (Flynnville) - A fresh water well was developed by the E.M.L. Corporation as part of a proposal to develop the Pacheteau resort area.
 - e. Solari Wellsite - Open discussions with existing owners for testing and possible access or acquisition potential.
 - f. Dredging of reservoir - Evaluate existing information and update engineered estimates and feasibility.

- g. Raise dam - Evaluate existing information and update engineered estimates and feasibility.
96. The City shall use its corporate powers to collect funds for water, wastewater, and stormwater expansion and repair. Proposed system improvements shall be included within the Capital Improvements Plan.
97. The City shall provide educational information on water conservation to Calistoga citizens and businesses.
98. The City shall review all Use Permits and other discretionary permits for any excessive water use above quotas.
99. The City shall prepare a water rationing plan to be used in case acute water shortages occur.
100. The City and the Regional Water Quality Control Board shall monitor commercial and industrial effluent, and issue warnings or consider fines for excessive water degradation.
101. The City shall investigate and secure tenure on effluent spray irrigation sites including, but not limited to, the following:
- Fox Property
 - Airport
 - Fredianni Storage Ponds (10 MG)
102. The City shall adopt land use regulations which limit the ability of large residential, commercial, and industrial land uses to use the cold water aquifer for uses other than landscaping purposes.
103. The City shall require new land uses to hook up to the City water supply if located nearby infrastructure. The City shall not allow the use of groundwater as the primary source of water.
104. The City shall survey all existing wells in Calistoga for compliance with the City's Backflow Prevention Program.
105. The City Fire Department shall ensure that existing and new development in fire hazard areas provide adequate clearance around structures.
106. The City shall investigate methods to improve fire apparatus access on existing streets and driveways.

107. The City shall adopt an ordinance complying with the Quimby Act provisions requiring 3 to 5 acres of open space per 1000 persons in Calistoga for the establishment of additional parks in the City.
108. The City shall initiate a comprehensive plan for development of parks and retention of open space.
109. The City shall annually update its Capital Improvements Plan to ensure that municipal systems are in good repair.
110. The City shall consider the adoption of Policies and Requirements to ensure adequate staffing levels for public services.
111. The City shall implement a program for reducing solid waste generation and encouraging recycling.

MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
ENVIRONMENTAL IMPACT REPORT				
<u>Fiscal Years 1990-1991</u>				
7. The City shall petition LAFCO to expand its Sphere of Influence to include the Study Area.	CC, PC, PD			
25. The City shall coordinate with the operators of the Napa Valley Wine Train to extend the service to Calistoga subsequent to environmental analysis.	CC, PC, PD			
34. The City shall establish a housing impact fee for new businesses to help house employees for low- salaried positions.	CC, PC, PD			
45. The City shall designate a housing coordinator to work with the Planning Department and/or with the City Administrator. Responsibilities of	CC			
Notes:	CC = City Council FD = Fire Department FY = Fiscal Year HP = Housing Program	PC = Planning Commission PD = Planning Department PL = Police Department PW = Public Works Department		

MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<p>the Housing Coordinator shall include, but are not limited to, developing a pilot program to package housing incentives and funding sources aimed at developing affordable housing, farmworker housing, emergency shelters, and other types of housing. The coordinator shall also make recommendations for use of the City's CDBG repayments funds to the City Council.</p>				
<p>54. The City shall enact an ordinance requiring loan recipients to give one-year advance notice to the City of potential conversions to market rate units.</p>	CC, PC, PD			
<p>56. The City shall amend its Subdivision Ordinance and Zoning Ordinance to comply with the State Subdivision Map Act.</p>	PD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
82. The City shall prepare an amendment to the Tree Preservation Ordinance specifically addressing the City's oak and historic trees.	CC, PC, PD			
97. The City shall provide educational information on water conservation to Calistoga citizens and businesses.	PW			
106. The City shall investigate methods to improve fire apparatus access on existing streets and driveways.	CC, PC, PW			
111. The City shall implement a program for reducing solid waste generation and encouraging recycling.	CC, PC, PW			

Fiscal Years 1990-1992

1. The City shall amend the Zoning Code to ensure that proposed commercial development abutting residential uses provides for ample building setbacks and buffering.	PD
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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
2. The City shall amend the Zoning Code to require multi-family structures located adjacent to single-family parcels to incorporate adequate screening into project design to prevent view intrusion.	PD			
3. The City shall amend the Zoning Code to avoid incompatible building heights.	PD			
6. The City shall amend the Zoning Code to protect the integrity of residential neighborhoods by restricting non-residential uses.	PD			
8. The City shall ensure that the Zoning Code prohibits tourist-based business outside the downtown area.	PD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
10. The City shall amend its Zoning and Subdivision Codes to allow for adequate landscaping in non-residential areas.	PD			
11. The City shall prepare an urban design study to coordinate the development of pedestrian amenities and the character of the downtown area. The study will include: <ul style="list-style-type: none"> ● Parking design and location ● Street tree theme ● Lighting ● Street furniture ● Building scale, bulk, and facade treatment ● Sign regulations ● Landscape standards 	PD, PW			
18. The City shall prepare a hillside management ordinance that will address:	PD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<ul style="list-style-type: none"> ● development location ● grading ● revegetation and landscaping ● light and glare 				
23. The City shall develop Zoning Code provisions to require that new development at the major entrances to the City be aesthetically pleasing in design, provide buffering between land uses, and retain open space and unique land features.	PD			
24. The City shall establish a scenic highway overlay in the Zoning Code to ensure development retains scenic vistas along Silverado Trail, Petrified Forest Road, State Highway 128 between the western City limits and Petrified Forest Road and Lake County Highway.	PD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
26. Through the environmental review process, the City shall analyze County-proposed developments for compatibility with adjacent City uses.	CC, PC, PD			
30. The City shall amend the Zoning Code to grant residential density use bonuses for very low and/or low income in order to comply with Governmental Code Sections 65913.4, 65915, and 65917.	PD			
33. The City shall encourage mixed-use development through its Zoning Ordinance.	PD			
38. The City, alone or in conjunction with the County, shall contact the California Debt Advisory Commission and investigate requirements to obtain authority for the issuance of Mortgage Credit Certificates (MCCs). The City and/or County shall work with local and real estate agencies and lenders to implement a MCC program.	HP			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
39. The City shall rezone a significant amount of land designated by the Zoning Code for Transitional uses to residential uses. Through the Zoning Code, the City shall allow limited residential units in commercial districts provided it can be done in a compatible manner.	PD			
40. The City shall consider rezoning lands designated for commercial and industrial uses with mixed uses in order to accommodate projected housing needs.	CC, PC, PD			
41. In accordance with Section 65852.3 and 65852.4 of the Government Code, the City shall revise its Zoning Code to allow manufactured homes in single-family zones.	PD			
42. In accordance with Sections 65852.7 of the Government Code, the City shall amend its Zoning Code to allow mobilehome parks on all land planned and zoned for residential uses.	PD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
43. In accordance with Section 65583(c)(1) of the Government Code, the City shall amend its Zoning Code to provide for the possibility of emergency and transitional shelters, should the need occur. Potential sites are shown on the Adequate Sites Map.	PD			
47. The City shall review previous re-development studies and consider encouraging the formation of a special assessment district in the "lower Washington" area. Funds from the assessment could fund long-term rehabilitation and property upgrading programs for existing properties and structures.	PD, HP			

- OR -

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<p>The City shall reinitiate efforts to prepare and implement a redevelopment plan for the "lower Washington area" of Calistoga, if feasible. The plan will consider replacing older multi-family units with new multi-family units for very low to low income households.</p>				
<p>51. The city shall amend the Zoning Code to be consistent with the General Plan Land Use Plan (diagram).</p>	PD			
<p>53. The City shall amend their Zoning Code to regulate the placement of Bed and Breakfast establishments in residential neighborhoods. The amendment shall regulate minimum spacing and location next to local streets to prevent the proliferation of nonresidential uses in residential neighborhoods.</p>	PD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
57. The City shall implement a fast-track application procedure for projects that include residential development, especially projects that include affordable housing.	PD			
65. The City shall develop a benefit assessment district or a similar mechanism to assist in the funding of parking lot construction to meet local and tourist demands.	CC, PC, PD, PW			
68. The City shall prepare an urban design study to coordinate the development of pedestrian amenities and the character of the downtown area. The study will include:	PD, PW			
<ul style="list-style-type: none"> ● Parking design and location ● Street tree theme ● Lighting ● Street furniture 				

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<ul style="list-style-type: none"> • Building scale, bulk, and facade treatment • Sign regulations • Landscape standards 				
<p>81. The City shall ensure that all waterways are managed as coherent ecological systems. All undeveloped waterways shall be buffered to prevent development and encroachment as follows:</p>	PD			
<p>d. The City shall prepare a study analyzing the feasibility of placing riparian vegetation corridors and linear parks in wetland sinks located along water courses, geothermal marshes and seasonal creeks in the City.</p>				
<p>84. The City shall protect watercourses and watersheds as follows:</p>	PD			
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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
c. The City shall investigate methods to improve water quality to enhance fisheries and public use.				
d. The City shall seek Urban Stream Restoration grant funds to help bank stability and improve water quality.				
88. The City shall prepare hillside design guidelines and zoning controls to protect slope stability, minimize soil erosion, preserve natural vegetation and scenic vistas.		PD		
95. The Public Works Department shall prepare a water enhancement plan. The following sources of water, among others, will be investigated:		PW		
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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
a. NBA Contract Negotiation - Open discussions with the Napa County Conservation District and City of Napa regarding increase in NBA allocations or direct long term purchase of additional water.				
b. Fiege Canyon Well Field - Investigate increasing production of existing wells and the potential for developing additional wells.				
c. Flynnville wells - Open discussions with existing owners for testing and possible access or acquisition potential.				

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
d. Pacheteau Wellsite (Flynnville) - A fresh water well was developed by the E.M.L. Corporation as part of a proposal to develop the Pacheteau resort area.				
e. Solari Wellsite - Open discussions with existing owners for testing and possible access or acquisition potential.				
f. Dredging of reservoir - Evaluate existing information and update engineered estimates and feasibility.				
g. Raise dam - Evaluate existing information and update engineered estimates and feasibility.				

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
99. The City shall prepare a water rationing plan to be used in case acute water shortages occur.	PW			
101. The City shall investigate and secure tenure on effluent spray irrigation sites including, but not limited to, the following: <ul style="list-style-type: none"> • Fox Property • Airport • Fredianni Storage Ponds (10 MG) 	PW			
102. The City shall adopt land use regulations which limit the ability of large residential, commercial, and industrial land uses to use the cold water aquifer for uses other than landscaping purposes.	CC, PC, PD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
104. The City shall survey all existing wells in Calistoga for compliance with the City's Backflow Prevention Program.	PW			
<u>Fiscal Years 1990-1993</u>				
20. The City shall prepare an Urban Design Plan for selected entrances to the City and the downtown core area.	PD			
22. Using citizens input, the City shall develop guidelines for each proposed scenic route corridor as required by the state, including guidelines for land use, site planning, outdoor advertising, landscaping, earth moving, and design.	CC, PC, PD			
64. The City shall improve directional signing systems to help guide visitors to their destinations.				

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<u>Fiscal Years 1990-1995</u>				
	Scenic Highways.			
27.	Through corporate and police powers, the City shall make every effort to meet its fair share of housing as determined by ABAG.		CC, PC, PD	
62.	The City, in conjunction with other municipalities, shall discuss possibilities of providing transportation services to citizens of Calistoga and the rest of the Napa Valley, including the possibility of utilizing designated cars on the Napa Valley Wine Train, a regional public bus system, or other forms of regional transportation.		CC, PC	
<u>Fiscal Years 1991-1993</u>				
21.	The City, in conjunction with the County of Napa, shall obtain official designation of Highways 29 and 128, Petrified Forest Road, and the Silverado Trail as Official State		CC, PC, PD	

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<u>Ongoing</u>				
4. The City shall prioritize development on infill parcels with existing public services and utilities.	CC, PC, PD			
9. The City shall locate neighborhood commercial within easy access to future residential developments.	CC, PC, PD			
12. The City shall designate sufficient land only to increase visitor accommodations in order to encourage visitors to stay overnight.	CC, PC, PD			
13. Through a revised Resource Management System Ordinance, the City shall monitor new development to ensure the adequate provision of water and wastewater services.	PD, PW			
14. Through its corporate powers the City shall provide for the construction of the following facilities:	CC, PC, PD, PW, FD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<ul style="list-style-type: none"> • a new police facility • an additional fire substation on the west side of Calistoga • an upgraded and expanded library • a public swimming pool for school and recreation • a senior citizen center • new school site as population levels warrant • a youth recreation center 				
15. The City shall ensure that new development is phased concurrently with planned infrastructure expansions.	PD, PW			
16. The City shall retain areas for visual amenities through development controls to protect the ridgeline and provide for site and design review of all development proposals.	PD			

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MITIGATION MONITORING CHECKLIST

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17. Through site and design review, the City shall ensure that proposed development shall not be visible from the valley floor. The appearance of rows of houses along the skyline shall be avoided.	PD			
19. Through the environmental review process, the City shall analyze areas of ecological sensitivity in relation to proposed development.	PD			
28. The City shall make use of governmental programs related to construction and rehabilitation needs of low and moderate income households. The City shall apply for and/or make applications available to the public. Funding sources include, but are not limited to:	HP			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
FEDERAL (FmHA)				
<ul style="list-style-type: none"> FmHA Section 502 - Rural Housing Home Improvement Loan Program. Provides loans to low income households to buy, build, improve, repair, or rehabilitate owner occupied rural homes. 				
<ul style="list-style-type: none"> Section 504 - Rural Housing Repairs Program. Provides loans and grants to very low income persons to make repairs necessary for health and safety. 				
<ul style="list-style-type: none"> Section 523 - Self-Help Housing. Provides grants and loans to fund technical assistance to groups building units financed under 502. 				

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MITIGATION MONITORING CHECKLIST

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<ul style="list-style-type: none"> Section 523/524 - Rural Housing Sites Loan Program. Provides direct loans to private or public non-profit organizations to acquire and develop land in rural areas. 				
STATE				
<ul style="list-style-type: none"> California Self Help Housing Program. Through grants and loans to local governments and non-profit organizations, this program helps low and moderate income families construct or rehabilitate their homes. 				
<ul style="list-style-type: none"> Predevelopment Loan Program. Low interest loans to local governments and non-profit organizations for pre-development activities. 				
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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<ul style="list-style-type: none"> Nonprofit Housing Program. The California Housing Finance Agency (CHFA) provides permanent financing for contractor-built single-family homes developed by nonprofit organizations which serve lower income families. Minority and Small Business Development. CHFA assists minority-owned and women-owned developers. 				
LOCAL				
<ul style="list-style-type: none"> Inclusionary Housing Program. All new residential units - five or more are required to address affordable housing through providing 10% of the units as affordable to very low, low,- 				

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
and moderate income households, land dedication, in-lieu fee, or reasonable alternative method.				
<ul style="list-style-type: none"> • Make use of repayment funds from C.D.B.G. Rehabilitation board to facilitate retention, repair, and development of affordable housing units. 				
29. The City shall ensure that all rental property owners allow the use of Section 8 rental assistance certificates.	HP			
31. The City shall continue to implement the provisions of the Second Dwelling Units Chapter (17.37) of the City Zoning Code.	CC, PC, PD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<p>32. The City shall keep a list of all available and appropriate federal, state, and local funding sources that support rental housing units. The City shall apply and/or provide applications to the following programs:</p>	HP			
FEDERAL (FmHA)				
<ul style="list-style-type: none"> Section 515 - Rural Rental Housing Program. Provides loans to construct and rehabilitate rental and co-operate housing for low and moderate income families and elderly persons. 				
STATE				
<ul style="list-style-type: none"> Rental Housing Construction Program. Provides loans to local governments for the development of rental housing. 				

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<ul style="list-style-type: none"> The City shall apply for Proposition 77 and 84 funds for rehabilitation and construction of rental units. 				
LOCAL				
<ul style="list-style-type: none"> Inclusionary Housing Program. All new residential units - five or more are required to address affordable housing through providing 10% of the units as affordable to very low and low income households, land dedication, in-lieu fee, or reasonable alternative method. 				
35. The City shall keep a list of all available state and regional programs that support housing for special need groups. The City shall apply and/or provide applications to	HP			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<p>the public. The City shall work with HCD and apply for the following programs:</p> <ul style="list-style-type: none"> • Emergency Shelter Program - Awards grants to local governments and non-profit organizations for actively aiding the homeless. • Senior Citizens Shared Housing Program - Provides grants to local governments and non-profit organizations helping seniors find others with whom they can share housing. • Office of Migrant Services - Awards grants to local governments for administration, management, operation, and rehabilitation of rental housing units for migrant families. 				
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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<ul style="list-style-type: none"> • Farm Labor Housing Rehabilitation Loan Program - Provides loans to the owners of farm labor housing to bring it into compliance with the Employers Housing Act. • Housing Assistance Program - Provides Section 8 certificates to developmentally, mentally, and physically disabled adults. The Napa Valley Housing Authority distributes Section 8 rental certificates. 				
37. The City shall provide information to developers and the public regarding the California Housing Finance Agency's (CHFA) bond financing program.	HP			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
44. The City shall maintain a list that provides information on approved and proposed projects, especially projects which include rental housing. This list shall be made available to the public.	PD			
46. The City shall review its Capital Improvement Program annually to ensure that sewer/water/street improvements facilitate timely residential development.	PD, PW			
48. The City shall make use of governmental programs listed in Implementing Program 3 under Goal A of the Housing Element. In addition, the City shall apply for and/or provide applications for the following programs:	HP			

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MITIGATION MONITORING CHECKLIST

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FEDERAL (FmHA)				
<ul style="list-style-type: none"> 533 - Rural Preservation Grant Program. Funds non-profit organizations to rehabilitate older rural homes for very low and low income families. 				
STATE				
<ul style="list-style-type: none"> Special User Housing Rehabilitation Program. Offers loans for rehabilitating residential, hotels, and other housing occupied by the elderly, disabled, and low income persons. 				
<ul style="list-style-type: none"> Deferred Payment Rehabilitation Loan Program. Provides loans to local governments to assist with the rehabilitation of housing for low and moderate income households. 				

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
49. The City shall annually update its Capital Improvements Plan to ensure that municipal systems are in good repair.	PD, PW			
50. The City shall continue to enforce the provisions of the City Municipal Code and resolutions in order to maintain existing mobilehome parks.	CC, PC, PD, PW			
52. The City shall review all loan agreements for housing assistance to ensure clauses are included which require unit owners to retain the families that occupied the units prior to rehabilitation, unless adequate cause can be shown.	HP			
55. Through its Inclusionary Housing Program, the City shall assist non-profit housing corporations in purchasing subsidy termination units.	CC, PC, PD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
58. The City shall continue to reduce, waive, or allow deferred payments of Resource Management System fees for second units, senior housing, and very low to low income housing projects.	PD, PW			
59. The City shall promote higher density and infill development.	CC, PC, PD			
60. The City shall develop their circulation system according to the Circulation Plan and diagrams.	CC, PC, PD, PW			
61. Through the Capital Improvements Plan and related impact fees, the City shall ensure that adequate funds are provided to upgrade and maintain the existing circulation network.	CC, PC, PD, PW			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
63. Through the environmental review process, the City shall require proposed developments to include appropriate site planning techniques which minimize traffic impacts, and to provide necessary street improvements.	PD, PW			
66. The City shall review parking facilities as part of the design review process for new or expanded development projects.	PD, PW			
67. The City shall require repair and/or construction of sidewalks on all residential, collector and arterial streets.	PD, PW			
69. The City shall implement improvements recommended in the MEA and in the Circulation Element of the General Plan. Special attention shall be given to improvements related to pedestrian and bicycle usage.	CC, PC, PD, PW			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
70. The City shall review all development proposals for short-term and long-term impacts to air quality.	PD			
71. The City shall support the Bay Area Air Quality Management District, and implement reasonable and feasible new regulations related to the improvements of air quality.	PD			
74. The City Planning Department shall evaluate all proposed projects for noise exposure in accordance with the flow chart in Figure 4 in the Technical Supplement to the Noise Element of the City of Calistoga General Plan prepared by Sound Solutions on October 23, 1989.	PD			
75. The City Planning Department shall evaluate all proposed projects involving noise sources for noise production in accordance with the flow chart in Figure 5 in the Tech-	PD			

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MITIGATION MONITORING CHECKLIST

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<p>nical Supplement to the Noise Element of the City of Calistoga General Plan prepared by Sound Solutions on October 23, 1989.</p>				
<p>77. The City Planning Department shall require post-project monitoring of noise levels when appropriate to determine whether the completed project is in compliance with Noise Element standards.</p>	PW			
<p>78. The City shall review and comment on documents of a regional nature that pertain to noise.</p>	PD			
<p>79. The City shall implement all recommended improvements related to bicycle and pedestrian paths as stated in the Circulation Element.</p>	CC, PC, PD, PW			
<p>80. Due to the presence of endangered species, the City shall require all work associated with wetlands to</p>	PD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<p>complete botanical surveys and obtain environmental review prior to any modifications.</p> <p>81. The City shall ensure that all waterways are managed as coherent ecological systems. All undeveloped waterways shall be buffered to prevent development and encroachment as follows:</p> <p>a. For minor tributaries, a minimum of 30-foot setbacks shall be required from the top of the high bank.</p> <p>b. For the Napa River, a minimum setback of 30 feet from the top of the high bank shall be limited to access for maintenance, erosion control, and pedestrian/bicycle pathways.</p>	PD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
c. Within setback zones, cross fences shall not be allowed, and the zones shall not be used for alternative purposes including, livestock grazing, lawn clippings, or trash disposal.				
83. Through the environmental review process, the City shall require a study of native habitats and biological resources where appropriate by a qualified biologist prior to development.	PD			
84. The City shall protect watercourses and watersheds as follows:	PD			
a. Development proposed in erosion-prone areas shall be required to include a soils and hydrological analysis for environmental review.				

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<p>b. The City shall review all County policies and development proposals in watersheds. The City shall encourage the County through the environmental review process to protect watersheds.</p>				
<p>85. The City encourages the use of Mt. Washington and Mt. Lincoln, Oat Hill Trail Road, and other recreational areas for low intensive uses such as: bicycle and hiking trails, educational signage, benches and fencing in accordance with the Land Use Element.</p>	PD			
<p>86. The City shall ensure that all waterways are buffered to prevent development and reserve the Open Space associated with rivers and streams in Calistoga.</p>	PD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
87. In conjunction with site review or use permit approval, the City shall require a detailed grading and landscaping plan for new developments. The plan shall be reviewed by the Planning Development for its treatment of hillsides, forest lands, sensitive areas, viewsheds, and other aesthetic features.	PD			
89. The City will prioritize development on infill parcels with existing public services and utilities.	CC, PC, PD			
90. Through a revised Resource Management System Ordinance the City shall monitor new development to ensure the adequate provision of water and wastewater services.	PD, PW			
91. Through its corporate powers the City shall provide for the construction of the following facilities:	CC, PC, PD, PW, PC, FD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<ul style="list-style-type: none"> • a new police facility • an additional fire substation on the west side of Calistoga • an upgraded and expanded library • a public swimming pool for school and recreation • a senior citizen center • new school site as population levels warrant • a youth recreation center • City administrative services 	PD, PW			
93. The City shall ensure that new development is phased concurrently with planned infrastructure expansions.				
94. Through the Resource Management System and environmental review process, the City shall coordinate public utility provision with land development.	PD, PW			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
96. The City shall use its corporate powers to collect funds for water, wastewater, and stormwater expansion and repair. Proposed system improvements shall be included within the Capital Improvements Plan.	CC, PC, PD, PW			
98. The City shall review all Use Permits and other discretionary permits for any excessive water use above quotas.	PD, PW			
100. The City and the Regional Water Quality Control Board shall monitor commercial and industrial effluent, and issue warnings or consider fines for excessive water degradation.	PW			
103. The City shall require new land uses to hook up to the City water supply if located nearby infrastructure. The City shall not allow the use of groundwater as the primary source of water.	PD, PW			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
105. The City Fire Department shall ensure that existing and new development in fire hazard areas provide adequate clearance around structures.	FD			
109. The City shall annually update its Capital Improvements Plan to ensure that municipal systems are in good repair.	PD, PW			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
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INITIAL STUDY

Fiscal Year 1990-1991

Safety Element

- | | |
|---|------------|
| D.I.7. The City will comply with the provisions of Government Code Sections 8875 et. seq. which requires all cities and counties located within Seismic Zone 4 to inventory all of the potentially hazardous unreinforced masonry buildings within their jurisdictions. | CC, PC, PW |
|---|------------|

Fiscal Year 1990-1992

Safety Element

- | | |
|---|--------|
| D.I.2. The City and County, through preparation of a study, will determine the location and extent of sand deposits that are susceptible to liquefaction. | PD, PW |
|---|--------|

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
Conservation Element				
B.I.1. The City will protect water courses and watersheds as follows:	PD			
c. The City shall investigate methods to improve water quality to enhance fisheries and public use.				
d. The City shall seek Urban Stream Restoration grant funds to help bank stability and improve water quality.				
Safety Element				
D.I.1. The City will initiate or support individuals who want to prepare a floodway map that more accurately reflects land elevations and incremental flood plain boundaries.	PD, PW			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
Open Space Element				
B.I.3. The City will develop measures in the Zoning Code for the protection of view corridors, unique landforms, scenic highways and buffers between neighborhoods. This shall include establishment of a scenic highway overlay district along Silverado Trail and Lake County Highway.	CC, PC, PD			
<u>Ongoing</u>				
Conservation Element				
B.I.1. The City will protect watercourses and watersheds as follows:	PD			
a. Development proposed in erosion-prone areas shall be required to include a soils and hydrological analysis for environmental review.				

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
<p>b. The City shall review all County policies and development proposals in watersheds. The City shall encourage the County through the environmental review process to protect watersheds.</p>				
<p>B.I.2. The City will continue to implement improvements recommended in the Wastewater Treatment and Disposal Facilities Plan.</p>	PW			
<p>D.I.1. The City will assist property owners in their restoration efforts. This includes providing information on preservation resources and assisting in the placement of structures on the National Register of Historic Places.</p>	PD, PW			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
D.I.2. The City will regulate changes in the exteriors of structures identified in the Napa County Historic Resources Inventory, Cities of Calistoga and Yountville Volume, and in the California Archaeological Inventory as well as any future historic assessments. This can be accomplished through design review to enhance the value of Calistoga's heritage.	CC, PC, PD, PW			
D.I.3. The City will seek private and public funding for historic preservation.	PD			
D.I.4. The State Historic Building Code will be used at the Building's Official's discretion on any structure identified in the Napa County Historic Resources Inventory, Cities of Calistoga and Yountville Volume, and in the California Archaeological Inventory as well as any future historic assessments.	PW			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
D.I.5. Prior to ground disturbances, the City may require potential developers to investigate the presence of archaeological artifacts.	PD			
Open Space Element				
B.I.1. In conjunction with site plan review or use permit approval, the City will require a detailed grading and landscaping plan for new developments. The plan shall be reviewed by the Planning Department for its treatment of hillsides, forest lands, sensitive areas, viewsheds, and other aesthetic features.	PD			
Conservation Element				
A.I.7. The City will require soils investigations for proposed developments in unstable areas.	PD			

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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING		MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
Safety Element					
D.I.3.	For projects proposed in hazardous geologic areas, the City will require a geologic report that includes analysis of soils foundation, grading, erosion, and sediment control.	PD			
D.I.4.	The City will ensure that both public and private development in areas with significant identified geological hazards are sited to minimize the exposure of structures and improvements to damage resulting from geological hazards and to minimize the aggravation of off-site geological hazards.	PD			
Mitigation Measures					
M.M.1.	All projects proposed under the General Plan shall be assessed by the City for potential light and glare impacts.	PD			
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MITIGATION MONITORING CHECKLIST

MITIGATION MONITORING	MONITOR/RESPONSIBLE PARTY	INITIAL	VERIFICATION	DATE
M.M.2. The City shall require a Risk of Upset analysis for any proposal which may potentially result in the risk of explosion of the release of hazardous substances.	PD, PW			

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VIII. RESPONSE TO COMMENTS

VIII. RESPONSE TO COMMENTS

The purpose of the Response to Comments is to transmit all comments received related to the Draft Environmental Impact Report (EIR) prepared for the Calistoga General Plan Update.

PUBLIC REVIEW PERIOD

The Draft Environmental Impact Report for the Calistoga General Plan Update was distributed to various public agencies, responsible agencies, citizen groups, and interested individuals. The report was made available for public review and comment for a period of 45 days. The public review period for the Draft EIR established by the State Clearinghouse commenced on August 3, 1990 and expired on September 21, 1990.

The EIR was mailed directly to all Responsible and Trustee agencies. Many copies were mailed directly and made available at the Planning Department.

PUBLIC COMMENT

The City of Calistoga utilized several methods to solicit input on the Draft EIR and the General Plan Update. These methods included the preparation and distribution of a Notice of Preparation, distribution of a Draft EIR, preparation and distribution of the Notice of Completion, and scheduling of several public hearings.

NOTICE OF COMPLETION

A Notice of Completion was filed on August 3, 1990. This notice was filed with the State Office of Planning and Research.

ORGANIZATION AND FORMAT OF THE RESPONSE TO COMMENTS

Written comments received during the DEIR review period are contained in Appendix B. Comments have been numbered and responses have been correspondingly numbered. According to CEQA, responses must describe, "the disposition of significant environmental issues raised." (CEQA Guidelines, Section 15088(6)). Although not required, responses to comments which relate to design or planning issues have been responded to.

Letters received prior to the DEIR review period regarding the Master Environmental Assessment (MEA) or Policy and Plan document are located in Appendix B. Responses to the letters are also included in Appendix B.

WRITTEN COMMENTS INDEX - DEIR

STATUS	AGENCY	DATE	ACRONYM
State	Department of Conservation Division of Mines and Geology Dennis J. O'Bryant	9-7-90	DMG
	Department of Transportation Preston W. Kelly	9-17-90	DOT
	Department of Food and Agriculture Donna McIntosh	9-27-90	DFA
	Regional Water Quality Control Board Blair Allen	10-1-90	RWQCB

Department of Conservation, Division of Mines and Geology (DMG)

DMG - 1 Response

As a part of the tiering process allowed under CEQA, geologic/soils impacts will be addressed in site specific environmental analysis. Please refer to the Initial Study in Appendix A of the Draft EIR.

The comment is noted. Information on seismic and slope stability hazards has been incorporated from suggested references. Table TT has been added to the MEA to show the categories of slope stability found in the Calistoga area. Additions to the MEA are shown in Appendix B and the MEA Addendum.

Geothermal resources have been studied in the Minerals section of the MEA. The California Energy Commission 1986 report on geothermal resources in Calistoga is the basis for the discussion.

DMG - 2 Response

As a part of the tiering process allowed under CEQA, geologic/soils impacts will be addressed in site specific environmental analysis. Please refer to the Initial Study in Appendix A of the Draft EIR.

The comment is noted. Exhibit 22 of the MEA has been revised to indicate the Maacama fault. Table QQ now includes information on active and potentially active faults that could affect the City. Additions to the MEA are shown in Appendix B and the MEA Addendum.

Department of Transportation (DOT)

DOT - 1 Response

The comment is noted and forwarded to the appropriate decisionmakers. Response to DOT letters of February 27 and July 9, 1990 are located in Appendix B.

Department of Food and Agriculture, Donna McIntosh (DFA)

Response to DFA-1

The Important Farmlands Map shown as Exhibit 7 of the EIR (page 27) is based on the Napa County Important Farmland Map prepared by the Department of Food and Agriculture, State of California. It does not reflect accurately actual land use nor zoning

designations. It is informational only to the extent that it generally indicates the location and amount of farmable land within the City. It does not reflect site specific soil conditions such as geothermal contamination of several properties in the City along Silverado Trail and Mora and Greenwood Avenues.

Only one area within the existing City limits is considered to be prime agricultural land. Its General Plan designation is Rural Residential. Since limited light agricultural uses and structures are permitted within this designation, no impacts are anticipated. In accordance with the tiering process described in the Initial Study (Appendix A of the Draft EIR), specific development proposals will be analyzed for environmental impacts as the General Plan is implemented.

Response to DFA-2

The annual growth rate on page 38 is an average annual growth rate. Assuming a continuous growth rate of 2.85% per year, the population of Calistoga would grow from the 1989 level of 4,386 to approximately 7,910. This continuous growth rate would be consistent with the Resource Management System. This latter information will be added to the Errata section of the Final EIR.

As discussed on pages 128 to 130 of the Draft EIR, current water reserves are inadequate for projected growth. Implementation of City conservation programs in conjunction with the identification and utilization of other water resources will reduce impacts to a level of insignificance. Please refer to Mitigation Measures 95 through 99.

Response to DFA-3

The study area includes unincorporated land under the jurisdiction of the County of Napa. This area has been incorporated into the analysis since the City of Calistoga provides some services to the area. No land use designations have been applied to the unincorporated area.

California Regional Water Quality Control Board, Blair Allen (RWQCB)

Response to RWQCB-1

The comment is noted. Please refer to additions to the Errata section below.

Response to RWQCB-2 through RWQCB-4

Please refer to Response to RWQCB-1.

Response to RWQCB-5

The comment is noted.

Response to RWQCB-6

The information contained in the Draft EIR was taken from the City of Calistoga Master Environmental Assessment prepared in 1989. At the time of preparation of the MEA data on wastewater flows for 1989 and 1990 was not available. The comment is noted and included in additions to the Errata section located below.

Response to RWQCB-7

The comment is noted. Page 123, Paragraph 4 of the Public Service and Utilities section in the Draft EIR indicates that of twelve actions to be completed by 1989 for Priority 1 Improvements, only two have been implemented.

Response to RWQCB-8

The comment is noted and forwarded to the appropriate decisionmakers.

IX. ERRATA

IX. ERRATA

The following are corrections to the Draft EIR as indicated in comments received from Planning Commission Hearings, City Council Hearings, and written comments from State agencies and the public.

Page 32, Item 24 to read:

The City shall establish a scenic highway overlay in the Zoning Code to ensure development retains scenic vistas along Silverado Trail, Petrified Forest Road, State Highway 128 between the western City limits and Petrified Forest Road, and Lake County Highway.

Page 38, Paragraph 2:

Implementation of the General Plan as proposed in the Draft EIR would result in an increase of 3,408 persons over the existing 1989 population of 4,386 (2.1 persons per household multiplied by future housing units, 1,623). Please note that 1,678 is housing demand created under the Land Use Plan, and 1,634 is housing supply allowed under this plan.

Page 38, second paragraph, add:

. . . The average annual growth rate would equal approximately 4.0%. Assuming a continuous growth rate of 2.85% per year, the population of Calistoga would grow from the 1989 level of 4,386 to approximately 7,910. The continuous growth rate would be consistent with the Resource Management System.

Page 54, Paragraph 5:

Build-out of the Land Use Plan will not meet estimated housing demand, allowing a shortfall of 55 dwelling units. (Housing Demand [1,678] - Housing Supply [1,623] = 55 dwelling units)

Page 57, Top of Page:

This would meet and surpass the housing imbalance need of 55 units. Please refer to previous comment for calculation.

Page 110, Item 81(b) to read:

For the Napa River, a minimum setback of 30 feet from the top of the high bank shall be limited to access for maintenance, erosion control, and pedestrian/bicycle pathways.

Page 111, Item 85 change to read:

The City encourages the use of Mt. Washington and Mt. Lincoln, Oat Hill Trail Road, and other recreational areas for low intensity uses such as: bicycle and hiking trails, educational signage, benches and fencing in accordance with the Land Use Element.

Page 121, top of page, add:

As of May 1988, about .3 mgd of the total flow was due to these two sources of non-domestic flow. The City's wastewater flows have remained in excess of the permitted limit for 1989 and 1990.

Page 121, second paragraph change "Maximum Field Property" to "Maxfield Property."

Page 123, first paragraph second sentence, change "demonstrated" to "demonstrate."

Page 135, Item 103 to read:

The City shall require new land uses to hook up to the City water supply if located near a water distribution line. The City shall not allow these uses to use groundwater as the primary source of water.

Page 139, seventh paragraph change "(mg/d.) 557" to "(mgd) .557."

Page 141, last paragraph, second sentence, change "mg/d. 469" to "(mgd) .469."

Page 157, Item 24, to read:

The City shall establish a scenic highway overlay in the Zoning Code to ensure development retains scenic vistas along Silverado Trail, Petrified Forest Road, Highway 128 between the western City limits and Petrified Forest Road, and Lake County Highway.

Page 165, Item 81(b) to read:

For the Napa River, a minimum setback of 30 feet from the top of the high bank shall be limited to access for maintenance, erosion control, and pedestrian/bicycle pathways.

Page 166, Item 85 to read:

The City encourages the use of Mt. Washington and Mt. Lincoln, Oat Hill Trail Road, and other recreational areas to low intensive uses such as: bicycle and hiking trails, educational signage, benches and fencing in accordance with the Land Use Element.

APPENDICES

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
LAND USE	The change in land use designation from agricultural to Rural Residential and Medium Density Residential uses is not considered a significant impact.	Same.	None Required	Insignificant Impact
	The change from agricultural to residential uses is not considered a significant land use impact.	Same.	None Required	Insignificant Impact
	Adjacent land use designations in unincorporated County of Napa are considered compatible.	Same.	None Required	Insignificant Impact

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
	The incompatibility of adjacent commercial and residential land use can be mitigated to a level of insignificance.	Same.	Refer to Mitigation Measures 1-12 in the Land Use section.	Mitigated to a Level of Insignificance.
	The General Plan will have an impact on the Zoning Code.	Same.	Refer to Mitigation Measures 1-3, 6, 10 in the Land Use section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan will have an impact on the Resource Management System of the City of Calistoga.	Same.	Refer to Mitigation Measure 13 in the Land Use section.	Mitigated to a Level of Insignificance.

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
	Implementation of the General Plan may create land use impacts by initiating or expanding upon plans and programs that relate to land use, including an Urban Design Study, Construction of Public Facilities, Hillside Management Ordinance, and designation of a scenic highway corridor.	Same.	Refer to Mitigation Measures 14-26 in the Land Use section.	Mitigated to a Level of Insignificance.
POPULATION	The population growth that results from the implementation of the General Plan is not	Same.	None Required	Insignificant Impact

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
	considered a significant impact.			
HOUSING	Existing infrastructure constraints, may impact the City's ability to meet its fair share housing allocations for 1990-1995.	Same.	Refer to Mitigation Measures 27-59 in the Housing section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan may impact the availability of dwelling units for future employees, creating a project-specific and cumulative jobs/housing imbalance.	Same.	Refer to Mitigation Measures 27-59 in the Housing section.	Mitigated to a Level of Insignificance.

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
	Implementation of the General Plan may impact the availability of affordable housing for low and moderate income households, affecting in particular, special needs groups such as the elderly, farmworkers, the handicapped, large families, and single-parent households.	Same.	Refer to Mitigation Measures 27-59 in the Housing section.	Mitigated to a Level of Insignificance.
TRAFFIC AND CIRCULATION	Implementation of the General Plan will not significantly impact public transportation.	Same.	None Required	Insignificant Impact

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
	Implementation of the General Plan will not significantly impact air transportation.	Same.	None Required	Insignificant Impact
	Implementation of the General Plan will impact traffic volume and levels of service.	Same.	Refer to Mitigation Measures 60-64 in the Traffic and Circulation section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan will impact bicycle and pedestrian facilities.	Same.	Refer to Mitigation Measures 65,66 in the Traffic and Circulation section.	Mitigated to a Level of Insignificance.
	Implementation of the proposed project will impact the current parking	Same.	Refer to Mitigation Measures 67,68 in the Traffic and Circulation section.	Significant impacts that can be partially mitigated.

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
	<p>shortfall by increasing parking demand.</p> <p>Implementation of the General Plan, in conjunction with other past, present, and reasonably foreseeable/future projects will have a cumulative impact on regional traffic and circulation.</p>	<p>Same.</p>	<p>Refer to Mitigation Measures 60-68 in the Traffic and Circulation section.</p>	<p>Significant impact that can be partially mitigated.</p>
AIR QUALITY	<p>Project construction activities will temporarily impact air quality.</p>	<p>Same.</p>	<p>Refer to Mitigation Measure 70 in the Air Quality section.</p>	<p>Mitigated to a Level of Insignificance.</p>

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
	Implementation of the General Plan will have a long-term impact on pollutant emissions.	Same.	Refer to Mitigation Measures 69,70 in the Air Quality section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan, in conjunction with other General Plans within the Bay Area Air Quality Management District, will have a cumulative impact on air quality in the region.	Same.	Refer to Mitigation Measures 69-71 in the Air Quality section.	Significant impact that can be partially mitigated.
NOISE	Noise levels from the Soaring Center are within typical	Same.	None Required	Insignificant Impact

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
	noise standards and are not considered a significant impact.			
	Wind machine noise will be exposed to a greater number of people, but will be offset by a reduction of agricultural operation, and therefore, is not considered a significant impact.	Same.	None Required	Insignificant Impact
	Implementation of the General Plan, in conjunction with past, present, and reasonably foreseeable future projects, will have an	Same.	Refer to Mitigation Measures 72-79 in the Noise section.	Mitigated to a Level of Insignificance.

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
	incremental insignificant impact.			
	Future project developments will result in significant roadway impacts on Silverado Trail, Washington Street, Lake Street, and Berry Street.	Same.	Refer to Mitigation Measures 72-77, 79 in the Noise section.	Significant impact that can be partially mitigated.
	Noise impacts as a result of sprint car races at the Napa County Fairgrounds are expected to result in significant impacts.	Same.	Refer to Mitigation Measures 72,73 in the Noise section.	Significant impact that can be partially mitigated.

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
BIOLOGICAL RESOURCES	Implementation of the General Plan will not significantly impact the Calistoga popcorn flower or Napa bluegrass.	Designation of previous airport uses as commercial may impact the Calistoga popcorn flower or Napa Bluegrass.	Refer to Mitigation Measure 83 in the Biological Resources section.	Mitigated to a Level of Insignificance.
	Development according to proposed land use designations may impact native and riparian vegetation.	Same.	Refer to Mitigation Measures 80-88 in the Biological Resources section.	Mitigated to a Level of Insignificance.
	Destruction of any riparian or woodland habitats will significantly impact wildlife species.	Same.	Refer to Mitigation Measures 80-88 in the Biological Resources section.	Mitigated to a Level of Insignificance.

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
	Destruction of habitats along waterways will potentially impact the peregrine falcon and prairie falcon, both of which are listed as "endangered" by the state and/or federal agencies.	Same.	Refer to Mitigation Measures 80, 81, 83, 84, 86 in the Biological Resources section.	Mitigated to a Level of Insignificance.
	Buildout of the proposed project, in conjunction with past, present, and reasonably foreseeable development, will have a cumulative impact on native vegetation, wildlife, and threatened and endangered species.	Same.	Refer to Mitigation Measures 80-88 in the Biological Resources section.	Significant impact that can be partially mitigated.

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
PUBLIC SERVICES AND UTILITIES	Implementation of the General Plan will not significantly impact gas, electric, and telephone service.	Same.	None Required	Insignificant
	Implementation of the General Plan will not result in a significant cumulative impact on public services and utilities.	Same.	None Required	Insignificant
	Implementation of the General Plan will impact the ability of fire service staff and facilities to meet demands on fire protection.	Same.	Refer to Mitigation Measures 91, 92, 105, 106, 109, 110 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
	Implementation of the General Plan will impact the ability of the police staff and facilities to meet demands for police protection.	Same.	Refer to Mitigation Measures 91, 92, 109, 110 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan will impact the supply of water for the City.	Same.	Refer to Mitigation Measures 89, 90, 92-99, 102-104, 109 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan will impact the level of service and infrastructure for wastewater services.	Same.	Refer to Mitigation Measures 89, 90, 92-94, 96, 100, 101, 109 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
	Implementation of the General Plan will impact the City's storm drain system.	Same.	Refer to Mitigation Measures 96, 109 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan will impact solid waste services if the proposed expansion of the Cloverflat landfill is not approved.	Same.	Refer to Mitigation Measure 111 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan will impact the Calistoga School District as a result of increased enrollment due to population growth.	Same.	Refer to Mitigation Measures 91, 92, 110 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.

SUMMARY OF EXISTING AND REVISED PLANS

RESOURCE	EXISTING IMPACT	REVISED IMPACT	MITIGATION PROVIDED	LEVEL OF SIGNIFICANCE
	Implementation of the General Plan will impact library services provided by Napa City/County Library.	Same.	Refer to Mitigation Measure 91 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.
	Implementation of the General Plan will impact the ability of existing parkland to meet future park use demand.	Same.	Refer to Mitigation Measures 91, 92, 107, 108 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.
	Implementation of the proposed project will impact administrative services and Community Center Facilities.	Same.	Refer to Mitigation Measures 91, 92, 110 in the Public Services and Utilities section.	Mitigated to a Level of Insignificance.

APPENDIX B
WRITTEN COMMENTS

I. COMMENTS RECEIVED IN
RESPONSE TO THE
NOTICE OF COMPLETION

Memorandum

To : Dr. Gordon F. Snow
Assistant Secretary for Resources

Date September 7, 1990

Ms. Jo Noble
City of Calistoga
1232 Washington Street
Calistoga, CA 94515

Subject: Draft Environmental
Impact Report for
Calistoga General
Plan Update,
SCH# 90030423

From : Department of Conservation—Office of the Director

The Department of Conservation's Division of Mines and Geology (DMG) has reviewed the Draft Environmental Impact Report (EIR) for the City of Calistoga's General Plan Update. This Draft EIR analyzes the environmental impacts of the proposed update of the General Plan originally adopted on March 15, 1977. The study area of the General Plan is approximately 3.43 square miles, or 2,200 acres, of which 2.5 square miles, or 1,600 acres, are within the limits of the City of Calistoga. Specific development plans are not addressed in this EIR and will be analyzed as specific projects are proposed. The following reports were reviewed by DMG:

- o City of Calistoga, General Plan Update, Draft Master Environmental Assessment and Issues & Options, Volume I, prepared by STA Planning, Inc., December 1989.
- o City of Calistoga, General Plan Update, Policy and Program Document, Volume II, July 7, 1990.
- o Addendum to the Calistoga General Plan Update, Planning Commission Recommendations, Volume II, August 1, 1990.
- o General Plan Update, Draft Environmental Impact Report, City of Calistoga, Volume III of the General Plan, prepared by STA Planning, Inc. July 27, 1990, SCH# 90030423.

DMG-1

Based on our review of these documents, we offer the following comments:

1. The technical discussion of geologic and seismic hazards of the City of Calistoga is limited. This is partly due to a lack of specific geologic hazards studies in the Calistoga area. However, there are several existing regional studies that can assist the City in assessing the areas and level of geologic hazards. Potential areas of landslide hazards have been identified for the area around Calistoga by the U.S. Geological Survey (Nilsen and Wright, 1979; Wright and Reid, 1975). Seismic hazards of the Calistoga area have been recently evaluated by DMG (Hart, 1983) and by Wong (1990). Studies of the geothermal resources of Calistoga, including collection and interpretation of subsurface geologic data, have been undertaken by the State of California (Youngs and

Dr. Snow/Ms. Noble
September 7, 1990
Page Two

others, 1980; Taylor and others, 1981; Cal. Energy Comm., 1986). These technical documents may be of benefit to the City of Calistoga. We recommend that the City's Planning Director consider incorporating relevant data from these and other technical reports into the Safety Element.

DMG-1

2. The active faults that may affect the City of Calistoga are shown in Exhibit 22 of Volume 1 of the General Plan Update. This map does not label the Maacama fault located approximately 4 miles west of the City. The Maacama fault has been classified as active and is zoned under the Alquist-Priolo Special Studies Zone Act of 1972 (see the Mark West 7-1/2 min. A-P quadrangle map, issued July 1, 1983). This fault has a maximum credible earthquake of magnitude 7-1/2 (Wesnousky, 1986) and may present as great a hazard to the City of Calistoga as the West Napa fault. Peak ground accelerations from a maximum credible earthquake on the Maacama fault may exceed the 0.4g acceleration anticipated in the seismic design methods of the 1988 Uniform Building Code.

DMG-2

Therefore, we recommend that the City include, in the Safety Element, a table of the active and potentially active faults that may affect the City. This table should list the maximum credible and maximum probable earthquakes for each fault, the expected level of peak ground acceleration, and the duration of strong shaking. DMG Note 43, "Recommended Guidelines for Determining the Maximum Credible and the Maximum Probable Earthquakes", is enclosed. This document may aid in the determination of earthquake magnitude potential for nearby active faults.

If you have any questions regarding these comments, please contact Roger Martin, Division of Mines and Geology Environmental Review Project Manager, at (916) 322-2562.

Dennis J. O'Bryant
Environmental Program Coordinator

DJO:KC:skk

Enclosure

cc: Roger Martin, Division of Mines and Geology
Kit Custis, Division of Mines and Geology

Dr. Snow/Ms. Noble
September 7, 1990
Page Three

References:

California Energy Commission, October 1986, Staff Report of Calistoga Geothermal Resource Assessment, Final, technical document P 500-86-017, 76 pp.

Hart, E.W., and others, 1983, Summary Report: Fault Evaluation Program, 1981-1982 Area-Northern Coast Ranges Region, California, DMG Open-File Report 83-10, 17 pp.

Nilsen, T.H., and Wright, R.H., and others, 1979, Relative Slope Stability and Land-use Planning in the San Francisco Bay Region, California, U.S.G.S. Professional Paper 944, 96 pp.

Taylor, G.C., and others, 1981, Addendum to Resource Assessment of Low- and Moderate-Temperature Geothermal Waters in Calistoga, Napa County, California, DMG Open-File Report 81-13A.

Wesnousky, S.G., 1986, Earthquakes, Quaternary Faults, and Seismic Hazard in California, Journal of Geophysical Research, vol. 91, no. B12, pgs. 12,587-12,631.

Wright, R.H., and Reid, G.O., 1975, Photointerpretive Map of Landslides and Surficial Deposits of Northernmost Napa County, California, U.S. Geological Survey Misc. Field Studies Map MF-677, scale 1:24,000.

Wong, I.G., 1990, Seismotectonics of the Coast Ranges in the Vicinity of Lake Berryessa, Northern California, Bulletin of Seismological Society of America, vol. 80, no. 4, pps. 935-950.

Youngs, L.G., and others, 1980, Resource Assessment of Low- and Moderate-Temperature Geothermal Waters in Calistoga, Napa County, California, CMG Open-File Report, 81-13.



RECOMMENDED GUIDELINES FOR DETERMINING THE MAXIMUM CREDIBLE AND THE MAXIMUM PROBABLE EARTHQUAKES

The following guidelines were suggested by the Geotechnical Subcommittee of the State Building Safety Board on 3 February 1975 to assist those involved in the preparation of geologic/seismic reports as required by regulations of the California Administrative Code, Title 17, Chapter 8, Safety of Construction of Hospitals. CDMG is currently using these guidelines when reviewing geologic/seismic reports.

Maximum credible earthquake

The maximum credible earthquake is the maximum earthquake that appears capable of occurring under the presently known tectonic framework. It is a rational and believable event that is in accord with all known geologic and seismologic facts. In determining the maximum credible earthquake, little regard is given to its probability of occurrence, except that its likelihood of occurring is great enough to be of concern. It is conceivable that the maximum credible earthquake might be approached more frequently in one geologic environment than in another.

The following should be considered when deriving the maximum credible earthquake:

- (a) The seismic history of the vicinity and the geologic provinces;
- (b) the length of the significant fault or faults which can affect the site within a radius of 100 kilometers; (See CDMG Preliminary Report 13);

- (c) the type(s) of faults involved;
- (d) the tectonic and/or structural history;
- (e) the tectonic and/or structural pattern or regional setting (geologic framework);
- (f) the time factor shall not be a parameter.

Maximum probable earthquake (functional-basis earthquake)

The maximum probable earthquake is the maximum earthquake that is likely to occur during a 100-year interval. It is to be regarded as a probable occurrence, not as an assured event that will occur at a specific time.

The following should be considered when deriving the "functional-basis earthquake":

- (a) The regional seismicity, considering the known past seismic activity;
- (b) the fault or faults within a 100 kilometer radius that may be active within the next 100 years;
- (c) the types of faults considered;
- (d) the seismic recurrence factor for the area and faults (when known) within the 100 kilometer radius;
- (e) the mathematic probability or statistical analysis of seismic activity associated with the faults within the 100 kilometer radius (the recurrence information should be plotted graphically);
- (f) the postulated magnitude shall not be lower than the maximum that has occurred within historic time.

PYA, JES, RWS 2/75

DEPARTMENT OF TRANSPORTATION

BOX 7310

SAN FRANCISCO, CA 94120

(415) 923-4444



September 17, 1990

[Handwritten signature: dmy]
NAP-29-SEP 18 1990
SCH# 90030423
NAP000016

Richard Spitler
City of Calistoga
1232 Washington Street
Calistoga, CA 94515

RE: DRAFT EIR FOR THE CITY OF CALISTOGA'S GENERAL PLAN UPDATE

Dear Mr. Spitler:

Thank you for including the California State Department of Transportation (Caltrans) early in the review process for the Calistoga General Plan Update. We have previously reviewed the Master Environmental Assessment and Issues & Options (Volume 1), and the Traffic Analysis and Circulation System and Assessment. We have also received the letter dated July 28, 1990 from Allan G. Tilton addressing the concerns of our previous letters dated February 27, and July 9, 1990.

We appreciate the opportunity to work with you on this project and wish to continue close coordination on the implementation of the General Plan for Calistoga. We are available to meet with your planning and public works staff at your convenience.

Any proposed access connections to or work performed within the State right-of-way will require an Encroachment Permit. A complete application, environmental documentation and five (5) sets of plans should be submitted to the following address:

Permit Engineer
P.O. Box 7310
San Francisco, CA 94120
(415) 557-1984

DOT-1

September 17, 1990
NAP000016
Page 2

Should you have any questions on these comments, please contact DOT-1
Terry L. Barrie of my staff at (415) 557-7135.

Sincerely yours,

PRESTON W. KELLEY
District Director

by



FOR: GARY F. ADAMS
District CEQA Coordinator

TB:tp

cc: Nancy Mitchell, State Clearinghouse
Susan Pultz, MTC
Sally Germain, ABAG
Jeff Redding, Napa Co. Planning Dept.
Harry Hamilton, Napa Co. Public Works

OFFICE OF PLANNING AND RESEARCH

1400 TENTH STREET
SACRAMENTO, CA 95814

Sep 27, 1990

JO NOBLE
CITY OF CALISTOGA
1232 WASHINGTON STREET
CALISTOGA, CA 94515

SEP 28 1990

OCT 2 1990

Subject: CITY OF CALISTOGA GENERAL PLAN UPDATE
SCH # 90030423

Dear JO NOBLE:

The enclosed comments on your draft environmental documents were received by the State Clearinghouse after the end of the state review period. We are forwarding these comments to you because they provide information or raise issues which may assist you in project review.

Lead agencies are not required to respond to late comments. However, you may wish to incorporate these additional comments into the preparation of your final environmental document.

Please contact Lynne Coughlin or Nancy Mitchell at (916) 445-0613 if you have any questions concerning the review process. When you contact the Clearinghouse in this matter, please use the eight-digit State Clearinghouse number so that we may respond promptly.

Sincerely,

A handwritten signature in dark ink, appearing to read 'David C. Nunenkamp'.

David C. Nunenkamp
Deputy Director, Permit Assistance

Enclosures

cc: Resources Agency

Memorandum

To : Lynne Coughlin
State Clearinghouse
Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, California 95814

Date : September 14, 1990

Place : Sacramento

From : Department of Food and Agriculture --1220 N Street, P.O. Box 942871
Sacramento, CA 95814-0001

Subject: SCH No. 90030423 -- Calistoga General Plan Update

The California Department of Food and Agriculture (CDFA) has reviewed the Draft Environmental Impact Report (DEIR) on the above referenced project. This project would involve the adoption of an updated general plan. The implementation of this General Plan would result in the conversion of 66 acres designated as Agriculture to residential uses. The CDFA has the following comments and recommendations:

The DEIR seems to be inconsistent or unclear on these issues:

1. According to CEQA, loss of prime farmland, or impairment of use of prime farmland is considered a significant environmental effect (reported in the DEIR p.24). On page 26 of the DEIR, the text indicates that there is one small area designated as prime agricultural land in the city. However, the DEIR states that the conversion of agricultural land to residential uses is not considered a significant environmental effect. Agricultural potential of vacant land in the city has not been evaluated in the DEIR.
2. It is the intent of the 1984 Resource Management System (RMS) to carefully phase development consistent with the provision of public improvements by limiting growth to 2-3 percent annually (DEIR p.23). This project will generate a projected growth rate of 4 percent per year (DEIR p.38). What impact will this growth rate have on the RMS?

The CDFA suggests that these issues be clarified in the FEIR.

The CDFA supports the right of local agencies to develop and implement land-use policy in its area of influence. However, the CDFA wants to assure that agricultural land is not prematurely and

DFA-1

DFA-2

DFA-3

Lynne Coughlin
Page 2
September 14, 1990

irreversibly lost due to development which is not accurately
assessed for environmental impact.

DFA-3

Sincerely,



Donna McIntosh
Graduate Student Assistant
Agricultural Resources Branch
(916) 322-5227

cc: Napa County Agricultural Commissioner
California Association of Resource Conservation Districts

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

1800 HARRISON STREET, SUITE 700
OAKLAND, CA 94612Phone: Area Code 415
464-1255

FILED
[Signature]

OCT 4 1990
MAY 25 1990

October 1, 1990

File No.: 2138.04 (BDA)

Mr. Richard Spitler
Planning Director
City of Calistoga
1232 Washington Street
Calistoga, CA 94515

ATTN: Jo Noble

SUBJECT: CITY OF CALISTOGA GENERAL PLAN UPDATE - ENVIRONMENTAL
IMPACT REPORT, JULY 27, 1990; SCH# 90030423

Dear Mr. Spitler:

We have reviewed the subject Environmental Impact Report
(EIR), and have the following comments.

Several apparent typographical errors were found in discussions
about the City's wastewater system which should be corrected:

1. p. 121, second paragraph:

The entry shown as "Maximum field property" should be
"Maxfield property".

2. p. 123, first paragraph, second sentence:

The word "demonstrated" should be "demonstrate".

3. p. 139, seventh paragraph:

The value for projected increased wastewater flow is shown as
"wastewater (mg/d.) 557". In the context of other wastewater
discussions in the subject document, it appears that the
intended reference is "wastewater (mgd) 0.557".

4. p. 141, last paragraph, second sentence:

The value for projected increased wastewater flow is shown as
"wastewater (mg/d.) 469". In the context of other wastewater
discussions in the subject document, it appears that the
intended reference is "wastewater (mgd) 0.469".

RWQCB-1

RWQCB-2 RWQCB-3 RWQCB-4

Mr. Richard Spitler
City of Calistoga

- 2 -

October 1, 1990

RWQCB-5

RWQCB-6

RWQCB-7

RWQCB-8

The City of Calistoga's Wastewater Treatment Plant currently operates under waste discharge requirements prescribed in this Regional Board's Orders No. 87-028 and 88-060. The former serves as a National Pollutant Discharge Elimination System (NPDES) Permit which governs operation of the treatment plant and discharges to the Napa River, and the latter permit governs the discharge of treated effluent to various land applications (wastewater reclamation).

The subject EIR correctly notes that in 1987 and 1988 the City's wastewater flows were in excess of the treatment plant's rated capacity (NPDES Permit average dry weather flow limit of 0.62 million gallons per day). It should be noted that the City's wastewater flows have remained in excess of the permitted limit for 1989 and 1990.

As discussed in the subject EIR, a 10-year plan of proposed improvements to the City's wastewater facilities was developed in May 1988 (by the City's consultant, Kennedy/Jenks/Chilton Engineers). Following delays in initiating the proposed and needed improvements, a revised plan was developed in March 1989 for the Priority 1 Improvements, which were intended to rectify past NPDES Permit violations, correct existing deficiencies, and, ultimately, accomodate average dry weather flows of 0.75 million gallons per day. Although these improvements were planned to be implemented during 1989, they have not yet been completed.

We would like to emphasize that the City's wastewater facilities are presently operating at or above their rated and permitted capacity, and the existing facilities are inadequate to accomodate any increased flows and loadings.

We strongly recommend that no increase in wastewater flows or loadings to the City's treatment plant be permitted until such time that the improvements necessary to provide adequate and reliable increased treatment and disposal capacity are completed, and consistent compliance with waste discharge requirements has been demonstrated.

Thank you for the opportunity to comment on this project. If you have any questions about the above comments, please contact me at (415) 464 - 1309.

Sincerely,

Blair Allen

Blair Allen
Sanitary Engineer Associate

cc: Lynne Coughlin, SCH

II. COMMENTS RECEIVED
IN RESPONSE TO
THE NOTICE OF PREPARATION,
MEA, AND
POLICY AND PROGRAM DOCUMENT



NAPA COUNTY

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

TRENT CAVE, R.S.
Director of Environmental Management

HAZARDOUS MATERIAL SECTION
625 IMPERIAL WAY, SUITE #9 • NAPA, CALIFORNIA 94559-1329
AREA CODE 707/253-4269 ATSS #528-4269
FAX 707/253-4176

Feb. 6, 1990

Richard Spitler, Planning Director
City of Calistoga
1232 Washington St.
Calistoga, CA 94515

SUBJECT: Draft General Plan Update for the City of Calistoga

On Page 161 of the above document, you list three sites which are contaminated according to the State Office of Permit Assistance within the City. I offer the following information for your consideration. As of January 31, 1990, we have 9 contaminated sites listed in our files within the City.

They include two of the three sites listed by the State Office of Permit Assistance and the added City Hall parking lot site which you identified. Our records indicate that the Department of Transportation site at 1413 Tubbs Lane is not within the City. I have enclosed a copy of our list with an indication of the source and contaminate where known. Page 164, Finding 7 should be changed to reflect these additional sites.

The reference to the Napa County Hazardous Management Waste Plan 1988, should be changed to the "Draft Napa County Hazardous Waste Management Plan, March 1988" since a final plan has not been circulated or approved.

If you have any questions regarding these comments, please call me.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Ralph Hunter".

RALPH HUNTER
Environmental Management Manager

RH:ml

✓ cc: Jim Pahl, Senior Environmental Health Specialist

LIST OF CONTAMINATED SITES WITHIN
CITY OF CALISTOGA
AS OF JANUARY 31, 1990

<u>Haz Fac #</u>	<u>UST #</u>	<u>SITE</u>
	0393	Merchant Property 1506 Lincoln Ave., Calistoga Problem: Tank leaks Material: Aviation fuel Calistoga Mineral Water 504 Washington St., Calistoga Problem: Spill Material: Diesel
68		Chevron 1107 Foothill Blvd., Calistoga Problem: Tank leak Material: Gasoline
18		Calistoga Auto Body 1020B Foothill Blvd., Calistoga Problem: Unknown Material: Unknown
119		Proposed Police Facility 1232 Washington St., Calistoga Problem: Probable Tank leak Material: Petroleum Hydrocarbons
	0023	Bohan's Shell 1108 Lincoln Ave., Calistoga Problem: Tank Leak Material: Waste oil
	0229	Food & Liquor Store #168 940 Petrified Forest Rd., Calistoga Problem: Tank leak Material: Gasoline
	0033	Calistoga High School 1608 Lake St., Calistoga Problem: Tank leak Material: Diesel fuel
178		Calistoga Soaring Center 1546 Lincoln Ave., Calistoga Problem: Tank leak Material: Aviation fuel

CITY OF CALISTOGA

In Beautiful




Napa Valley

1232 WASHINGTON STREET • CALISTOGA, CALIFORNIA 94515 • (707) 942-5188

MEMORANDUM

DATE: November 7, 1990

TO: Ralph Hunter
Environmental Management Manager
County of Napa

FROM: Richard Spitler 
Acting Planning Director
City of Calistoga

SUBJECT: CALISTOGA GENERAL PLAN UPDATE

In response to your letter of February 6, 1990, the following has been added to the text of the Calistoga General Plan Update Master Environmental Assessment:

1. All nine contaminated sites are listed.
2. Finding 7 has been changed.
3. Reference is now made to the Draft Napa County Hazardous Waste Management Plan.

DEPARTMENT OF TRANSPORTATION

BOX 7310

SAN FRANCISCO, CA 94120

(415) 923-4444

LOCATION: NAP-29-CALISTOGA

SCH NO.: NONE

FILE NO: NAP000016

February 27, 1990

Jo Noble
City of Calistoga
1232 Washington Street
Calistoga, California 94515

Re: City of Calistoga General Plan Update - Traffic Analysis and
Circulation Assessment.

Dear Ms. Noble;

Thank you for including the California State Department of Transportation (Caltrans) in the early stages of the environmental review process. We have reviewed the above-referenced Circulation Assessment and forward the following comments:

- 1) It would be helpful if Cedar Street were labeled on the network on page 6.
- 2) Page 9 of the text indicates the peak hour in Calistoga to be both mid-day and PM, although the analysis addresses only AM & PM volumes. Please indicate how the analysis of the mid-day peak is accounted for within this study.
- 3) The 24-hour and peak hour volumes shown in table 1, page 11 have a wide variance from those shown in the 1987 Traffic Volumes on California State Highways, which is listed as reference #4 on page 60. (Note that the 1988 count book is the most current.) This variance should be explained. Existing traffic needs to be validated, as these numbers are the basis of all transportation modeling projections and analysis of operational and signal warrant criteria. Please indicate which modeling program was used for this analysis.
- 4) The 3rd paragraph on page 17 should follow the last paragraph referring to unsignalized intersections.
- 5) On page 19, on the next to last line, change "miles" to "rules".
- 6) Is Table 6 on page 21 referring to "No Passing" ?
- 7) On page 22, the PEAK HOUR ANALYSIS paragraph refers only to AM and PM peak hours. Please explain the mid-day peak reference on page 9.
- 8) Page 31, B.2. refers to considering the diversion of truck traffic from the downtown core (Lincoln St/Rte. 29). Caltrans will be interested in the development of this discussion if it proceeds to a further level of analysis.
- 9) On page 31 change "Figure 12" to "Figure 11".
- 10) Table 11 on page 43 should reiterate that GP BUILDOUT is year 2000.

COMMENTS cont:

- 11) Appendix A, page 1 cites the 3rd (1983) edition, of the Institute of Transportation Engineers trip generation manual, while reference A5 cites the latest 4th (1987) edition.
- 12) The validity of the signal warrants on State Routes 29 and 128 will have to be verified by our Office of Traffic Operations.
- 13) Any proposed widening or channelization at intersections on State Routes 29 or 128 should be justified as safety improvements before they can be included in the State Transportation Improvement Program.
- 14) Our Project Development Branch has no comments at this time on the proposed street connections to State Routes 29 and 128. They will wait until more details of the locations and prioritization become available.
- 15) Any proposed access connections to or work performed within the State Highway right-of-way must conform to standards set forth in the Caltrans Highway Design Manual and an encroachment permit must be obtained for such work. A completed application, environmental documentation, and five (5) sets of plans should be submitted to the following address:

Permit Engineer
P.O. Box 7310
San Francisco, Calif. 94120
(415) 557-1984

We appreciate the opportunity to work with you on this General Plan Update - Circulation Assessment and wish to continue close correspondence on its development. Should you have any questions regarding this comment, please contact Kit Curtiss of my staff at (415) 557-2495.

Sincerely yours,

BURCH C. BACHTOLD
District Director

by



WADE GREENE
District CEQA Coordinator

cc: Loreen McMahon, State Clearinghouse
Susan Pultz, MTC
Sally Germain, ABAG

bcc: George Gray/Brad McAllester
S Randolph/B Couchman
Shein Lin, Project Development
Bob Nijjar, Traffic
Ed Cole, Trans Studies

DEPARTMENT OF TRANSPORTATION

BOX 7310
SAN FRANCISCO, CA 94120
(415) 923-4444



July 9, 1990

dh
JUL 10 1990
LOCATION NO.: NAP 29 CALISTOGA
SCH. NO.: 90030423
FILE NO.: NAP000016

Richard Spitler
City of Calistoga
1232 Washington Street
Calistoga, CA 94515

RE: NOTICE OF PREPARATION FOR THE CITY OF CALISTOGA'S GENERAL PLAN
UPDATE

Dear Mr. Spitler:

Thank you for including the California State Department of Transportation (Caltrans) early in the review process for the Calistoga General Plan Update. We have previously reviewed the Master Environmental Assessment and Issues & Options (Volume I), and the Traffic Analysis and Circulation System and Assessment. A copy of our February 27, 1990 letter is provided for your information. Comments on the May 1990 Traffic Analysis Land-Use Options Assessment are as follows:

- 1) The street names should be noted on Figure 2 Page 6. The date of the existing traffic volumes should be identified.
- 2) The relevance of the discussion of the Environmental Capacity of streets on page 11 and 12 is unclear.
- 3) Calculations for the Level of Service on Tables 3A and 3B should be provided. Diagrams of turn movement counts should also be provided.
- 4) Additional information on the input and results of the traffic model should be provided. Specifically, what type of model was used? The existing Sub-Regional land use data should be shown on Table 4. Additional links on page 8 should be provided to show traffic on Route 128 at Tubbs Lane, Route 29 at Dunaweal Lane, and Route 29 at Greenwood Avenue.
- 5) The recommended mitigation measures discussed on page 25 are inconsistent with Figure 8 which shows proposed signals on Route 29 at Sparrow Street and at Fairway Extension.

- 6) The operational improvements discussed on page 26 are vague. The bike lanes and truck diversion route are not shown. The City should seriously consider prohibiting street parking along Route 29 in the downtown area.
- 7) Cost of improvements shown on Table 10 and 11 do not reflect the proposed signals on Route 29 at Sparrow Street and Fairway Extension.
- 8) The proposed traffic signals on Route 29 and 128 must meet Caltrans design standards and signal warrant criteria in the Highway Design Manual. The existing signal on Route 29 at Washington Street should be studied to see if it needs to be modified for the projected traffic volumes.
- 9) Caltrans does not oppose the realignment of Silverado Trail at Route 29. However, State funds are not available for this project. A Project Scope Summary Report is being prepared for a rehabilitation project on Route 29 between Wapoo Avenue and the Lake County Line. It is anticipated that this project will be constructed in 1993.
- 10) Any widening or channelization proposed on Route 29 or 128 should be studied by Caltrans for justification as safety improvements before they can be included in the STIP.
- 11) Table 9 showing the projected parking demand is missing.
- 12) Any proposed access connections to or work performed within the State right of way will require an Encroachment Permit. A completed application, environmental documentation and five (5) sets of plans should be submitted to the following address:

Permit Engineer
P. O. Box 7310
San Francisco, CA 94120
(415) 557-1984

Spitler/Napa000016
Page 3
July 9, 1990

We appreciate the opportunity to work with you on this General Plan Update Traffic Analysis and wish to continue close coordination on its development. Please forward two copies of the Draft EIR and the Traffic Analysis for the General Plan to the following address:

Gary F. Adams
District ATSD Coordinator
Caltrans District 4
P. O. Box 7310
San Francisco, CA 94120

Should you have any questions on these comments, please contact Terry L. Barrie of my staff at (415) 557-7135.

Sincerely yours,

PRESTON W. KELLEY
District Director

By

Kit Canters FOR:

GARY F. ADAMS
District ATSD Coordinator

TLB:lt

cc: Nancy Mitchell, State Clearing House
Susan Pultz, MTC
Sally Germain, ABAG
Wade Greene, District CEQA Coordinator

CITY OF CALISTOGA

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Napa Valley

1232 WASHINGTON STREET • CALISTOGA, CALIFORNIA 94515 • (707) 942-5188

August 17, 1990

Gary F. Adams
District ATSD Coordinator
Caltrans District 4
P.O. Box 7310
San Francisco, CA 94120

Dear Mr. Adams:

Thank you for responding to the notice of preparation for the City of Calistoga General Plan update. In your letter you asked several questions. Allan Tilton, Traffic Engineer, has responded to your questions in the attached letter.

I will be sending two copies of the EIR and traffic analysis to you under separate mailing.

Sincerely,

Richard D. Spitler
Consulting Planning Director

ALLAN G. TILTON, P.E.

Consulting Traffic Engineer

*P.O. Box 54
Forestville, CA 95436
707-887-1959*

July 28, 1990

File: 7304

Richard Spitler
City of Calistoga
1323 Washington Street
Calistoga, CA 94515

Dear Richard:

Reference is made to our telephone conversation of July 16, 1990 regarding response to comments to the City of Calistoga General Plan Update, Land-use Options Assessment from the California Department of Transportation, dated July 9, 1990.

The following amplifications are summarized below and are presented in the order as they appear in the July 9th letter from Caltrans.

1. Street names for minor streets are not shown in Figure 2, page 6. Traffic volume data were collected during the summer and fall of 1988.
2. Environmental Capacity is not relevant to state highways and major arterial roadways. However, Environmental Capacity is of concern with respect to residential streets. Residential streets represent the greatest portion of streets within the City of Calistoga and therefore is included within the analysis.
3. Calculations of level of service are available and are published under a separate cover.
4. The Quick Response II (QRSII) traffic model was used for the evaluation of the City of Calistoga. Land-use data were supplied by the City of Calistoga in the forms of the existing City of Calistoga General Plan, and alternative land-use options. Traffic volume maps for links within the study area available through the City of Calistoga.
5. Traffic signals at the intersections of Route 29 at Sparrow Street and Fairway Extension are shown as potential improvements which are dependant upon these routes being adopted. The cost of the new signals would be similar to the projected costs of traffic signals identified in Table 10 and 11.

Richard Spitler
July 28, 1990
Page Two

6. The operational improvements are not detailed which is consistent with general planning goals. Specific and detailed study will need to be undertaken as part of precise improvement proposals.
7. Traffic signals installed on state highways would be required to be designed to the current Caltrans standards in effect at that time.
8. The proposed realignment of Silverado Trail at State Route 29 would require City and possible County funding. Funding, all or in part, for such a project may be required of future development proposals which would impact this intersection.
10. Comment noted.
11. Table 9 should be provided.
12. Comment noted.

Please contact me if you have further questions.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Allan G. Tilton', is written over a large, loopy, circular flourish.

Allan G. Tilton, P.E.
Consulting Traffic Engineer

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
Housing Policy Development
Division
1800 Third Street, Room 430
P.O. Box 952053
Sacramento, CA 94252-2053
(916) 323-3176



July 24, 1990

Mr. David Ybarra
City Administrator
City of Calistoga
1231 Washington Street
Calistoga, CA

RE: Review of Calistoga's Draft Housing Element

Dear Mr. Ybarra:

Thank you for submitting Calistoga's draft housing element, contained in the General Plan Parts I and II, received June 15, 1990. As you know, we are required to review draft housing elements and report our findings to the locality (Government Code Section 65585 (b)).

Calistoga's housing element is a well-written and comprehensive document, and establishes an ambitious schedule of program actions. However, there are areas which, in our opinion, require revisions to bring the element into compliance with State housing law (Article 10.6 of the Government Code). Identified concerns were reviewed with Lisa Reynolds, Project Manager, STA Inc., in a telephone conversation on July 17, 1990. A listing of our recommended changes is included in the attached Appendix.

Chapter 1451, Statutes of 1989, requires all housing elements to include, by January 1, 1992, additional needs analyses and programs to address the potential conversion of existing assisted housing developments to non-low-income housing uses during the next ten-year period (Government Code Section 65583(a)(8) and (c)(6)). The appendix to this letter describes revisions (see B-5 and C-3) which, in our opinion, are necessary to comply with these requirements. Our comments are provided to assist the City in meeting the new requirements. However, because these revisions are not required until January 1, 1992, our comments will not affect the compliance status of the element until the 1992 statutory deadline..


Mr. David Ybarra
Page 2

The "Supplemental Housing Element Information" appendix attached to this letter contains information about recent legislative changes that may affect your housing programs.

We hope our comments are helpful to the City. If you have any questions about our comments, please contact Mario Angel of our staff at (916) 445-3485.

In accordance with their requests pursuant to the Public Information Act, we are forwarding a copy of this letter to the individuals listed below.

Sincerely,



Nancy J. Javor, Chief
Division of Housing Policy
Development

NJJ:MA:bt

Attachments

✓ Lisa Reynolds, Project Manager
Gary Hambly, Building Industry Association
Tom Cook, Bay Area Council
Revan A. F. Tranter, Association of Bay Area Governments
Kathleen Mikkelsen, Deputy Attorney General
Bob Cervantes, Governor's Office of Planning and Research
Richard Lyon, California Building Industry Association
Kerry Harrington Morrison, California Association of Realtors
Marc Brown, California Rural Legal Assistance Foundation
Christine D. Reed, Orange County Building Industry Association

APPENDIX

City of Calistoga

The following changes would, in our opinion, bring Calistoga's housing element into compliance with Article 10.6 of the Government Code. Following each recommended change we cite the supporting section of the Government Code. Where particular program examples or data sources are listed, these are suggestions for your information only. We recognize that Calistoga may choose other means of complying with the law.

A. Review and Revision

Review the previous element to evaluate appropriateness, effectiveness and progress in implementation, and reflect the results of this review in the revised element (Section 65588 (a) and (b)).

- a. "Appropriateness of goals, objectives and policies" (Section 65588 (a) (1)): A description of how the goals, objectives, policies, and programs of the updated element incorporate what has been learned from the results of the prior element.

Although the element provides results of the earlier element's programs, and analyzes the differences between what was planned in the previous element and what was achieved in Part I (pages 63-69), it does not describe how its goals, objectives, policies, and programs incorporate what has been learned from the results of the prior element.

B. Housing Needs, Resources, and Constraints

1. Expand the analysis of the special housing needs of the handicapped, elderly, and farmworkers (Section 65583 (a)). Although the element contains some general information about these groups, an adequate analysis should include a quantification of the total number of persons or households; a quantification and qualitative description of the need; and identification of potential solutions and resources to address the need.

Information on farmworkers may be available from local social service departments, the State Employment Development Department, Farm Bureau offices and the County housing authority. Information on the handicapped and elderly is available from census data and may be available from the Social Security Administration and the State Department of Rehabilitation. Where a serious unmet housing need is identified, program responses

should be provided.

2. Provide the number of units in need of replacement (Section 65583 (a)(2)). The City has made an assessment of its substandard housing units in Part I, page 41, but did not quantify the units in need of replacement.
3. The element should clarify the amount of land available with appropriate zoning and development standards, and with public services and facilities, to ensure that the City can accommodate its new construction need for all income levels (Section 65583(a)(3)).

The City's ability to accommodate its regional share of new construction need for low- and moderate-income housing appears to be dependent upon the R-2 and R-3 zoning categories (Part I, page 57-60). In addition, the City indicated in Part I, page 63, that it failed to meet its previous element's new construction goal for low- and moderate-income units.

It appears from Table X (Part I, page 59) that the total unit capacity under R-2 and R-3 zoning is 130 units. This is 87 units short of accommodating the City's total regional share and the quantified objective of 217 units for low- and moderate-income units.

The element should provide additional information as to how the City's density bonus program (Program A-5) will provide the opportunity for lower-income housing development at the densities described.

4. Expand the analysis of the City's land use controls and the growth limitations of the "Resource Management System (RMS) and Ordinance 442," as potential governmental constraints to the development of housing for all income levels (Section 65583 (a)(4)). The analysis should include a more detailed review of the City's zoning densities, development standards (setback and building height requirements, for example) and other land use policies including open space and parking requirements.

The City has indicated in Part I, page 46, that present zoning densities for rural residential "...constrain the development of affordable housing which tend to be built at higher densities." The City also indicates in Part I, page 60 that, "Due to desires for protection of historical residential areas it is likely that higher density designations will change to lower density designations." The City also indicated in its findings (Part I, page 68, Number 23) that, "There are limited amounts of land for multi-family development."

In our opinion, zoning could be a constraint to housing development if the density is relatively low in an area that could support higher density residential development, and the City has not identified any other opportunities for higher density development. In light of the City's past record in accommodating its new construction need for all income levels (Part I, page 63), the element should evaluate whether the City's zoning ordinance has served as a constraint (see comment D-3).

The City had indicated that the RMS limits development to 54 units per year. At this rate the City would be 40 units short of meeting its total regional share and its quantified objective of 310 units. How does the City anticipate accommodating its regional share of new construction in light of this growth control measure and the water/sewer connection limitations imposed by Ordinance 442? When is the moratorium imposed by the ordinance expected to be lifted? What mitigation measures will the City undertake during the term of the moratorium to accommodate the development of housing for all income groups?

5. Pursuant to Chapter 1451, Statutes of 1989, expand the analysis of assisted housing developments with the potential to convert to non-low-income housing uses during the next ten-year period (Section 65583(a)(8)).
 - a. Include all of the following information for each assisted project in the ten-year inventory: project name and address, the type of governmental assistance received, the earliest possible date of change from low-income use and the total number of elderly and non-elderly units that could be lost from the locality's low-income housing stock in each year during the ten-year period (Section 65583(a)(8)(A)). For the purpose of the subsequent cost analysis, it may be useful to format the inventory listing into two five-year groups referencing the dates of the earliest potential terminations of use restrictions.

Analysis of the inventory should characterize the nature of the units at risk, e.g., the average, or range of project sizes, building ages, tenant types (relative proportions of elderly vs. family), and peak period(s) of potential conversions. It is also useful to summarize the type of assistance programs, e.g., incidence of units at risk due to rental assistance contract expirations vs. loan prepayments; and condition of the housing stock as it may relate to housing rehabilitation needs.

- b. Include the following cost-analysis of at-risk assisted units (Section 65583(a)(8)(B)). An estimated cost of preserving all of the assisted housing developments, in aggregate over each of the two 5-year periods. This may be described relative to the estimated replacement costs, e.g., whether such costs would be anticipated to be higher or lower than replacement estimates, and for what reason(s), as well as the magnitude of the difference in estimates.
- c. Identify all financing sources which could be used to preserve the projects which could convert from low-income use over the ten years, including amounts of each program which have not been legally obligated, and which could be available for preservation of these projects. Financing sources to be analyzed include, but are not limited to, all of the following:
 - HUD Community Development Block Grant Program (CDBG) funds,
 - Redevelopment Low and Moderate Income Housing Funds
 - Administrative fees (reserves) of any housing authority operating within the community (Section 65583(a)(8)(D)).

For example, if your jurisdiction is a CDBG-entitlement city or county, or if it has received CDBG funds through the Small Cities nonentitlement program, indicate the approximate amount of annual funds which have been allocated for housing programs, and which might therefore be eligible for use in preserving at-risk units in the future.

For your information, recent legislation (Chapter 881, Statutes of 1989) amended Section 33334.3 of the Health and Safety Code regarding use of redevelopment agency funds as indicated below.

"The moneys in the Low and Moderate Income Housing Fund shall be used to increase, improve, and preserve the supply of low- and moderate-income housing within the territorial jurisdiction of the agency." (Section 33334.3(c)).

"'Increasing, improving, and preserving the community's supply of low- and moderate-income housing,' includes the preservation of rental housing units assisted by federal, state, or local government on the condition that units remain affordable to low-and moderate-income households,

including very low-income households, for a specified period of time, beyond the date the subsidies and use restrictions could be terminated and the assisted housing units converted to market rate rentals"(Section 33334.3(g)).

C. Housing Programs

1. Depending upon the results of the analysis described in B-3, the City may need a program to provide adequate sites which will be made available through appropriate zoning and development standards and with public services and facilities needed to facilitate and encourage the development of a variety of types of housing for all income levels, including rental housing (Section 65583 (c)(1)). Localities have used various methods to increase their residential development capacity such as: minimum densities, mixed-use zoning, increased height limitations, and redevelopment. These and other methods are discussed in our Questions and Answers paper which was sent under separate cover.

The City may wish to rezone vacant sites within the City and prezone sites proposed for annexation, to better accommodate the housing needs of the various income groups.

Since R-2 and R-3 zoning is the means by which the City intends to meet its very low, low- and moderate-income regional share allocation, does the City plan to provide any additional incentives to encourage the development of these units? If not, how does the City anticipate accommodating its regional share of new construction need through the present zoning categories?

2. Depending upon the results of the analysis of the City's land use controls described in B-4, the City may need a program to remove or mitigate any land use controls identified as governmental constraints (Section 65583 (c)(3)).

For example, the City may wish to grant additional density bonuses, exempt low- and moderate-income housing from the growth moratorium, ease parking requirements, reduce the turning radius on cul-de-sacs (35-40 feet may be adequate for modern fire equipment) or reduce open space requirements. Additional information regarding reducing development standards and site improvement requirements is available from the Joint Venture for Affordable Housing (JVAH) sponsored by HUD (contact Gary Haines at (415) 556-0796).

In light of the development limitations imposed by

Ordinance 442, the City has indicated an implementation program for water conservation (Part II, page 38). The City may wish to contact the California Department of Water Resources (916) 324-1097 for information on additional mitigation measures.

3. Pursuant to Chapter 1451, Statutes of 1989, describe program efforts to be undertaken to preserve for low-income use the assisted at-risk projects listed in the 10-year inventory. These efforts should include utilization of all financing sources identified earlier, except where the community has identified other (more) urgent needs for these funds (Section 655883(c)(6). Efforts might range from regulatory and technical assistance measures to for direct financial participation (loans/grants for acquisition /rehabilitation) for preserving the at-risk units.

CITY OF CALISTOGA

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Napa Valley

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November 7, 1990

Nancy J. Javor, Chief
Division of Housing Policy Development
Department of Housing and Community Development
P.O. Box 952053
Sacramento, CA 94252-2053

Dear Ms. Javor:

The City Council of the City of Calistoga adopted an update to the Calistoga General Plan on October 16, 1990. Prior to this action the draft Housing Element was reviewed by your agency and several comments were offered.

We believe that the newly adopted Housing Element has addressed your comments and is now in compliance with Article 10.6 of the Government Code.

Attached is an appendix explaining how we believe we have met your specific concerns. For your convenience the specific changes to the Housing Element that were made in response to your letter are underlined in the attached copy. A complete copy of the Housing Element is provided in Volume One - Master Environmental Assessment; and, Volume Two - Policy and Program Document.

If you have any questions, please call Richard Spitler, Planning Director, at (707) 963-1345 or Lisa Grueter, planning consultant, at (415) 296-7760. Thank you for your assistance regarding this matter.

Sincerely,

Natasha Merkuloff,
City Administrator

APPENDIX

Response to HCD letter of July 24, 1990 Regarding the City of Calistoga Housing Element

A. REVIEW AND REVISION

Text and a chart have been added regarding how the updated Housing Element has incorporated what was learned from the results of the prior Housing Element.

B. HOUSING NEEDS, RESOURCES AND CONSTRAINTS

1. The analysis relating to the special housing needs of the handicapped, elderly, and farmworkers has been expanded where additional information was available.

2. The number of housing units in need of replacement has been estimated at 365. Please refer to the additional discussion in the enclosed pages.

3. The additional analysis included in the Housing Element discusses the amount of land available for development. Where the original land use plan indicated that there was 130 dwelling units in the R-2 and R-3(HDR) categories, the adopted land use plan has the potential for an additional 348 dwelling units in the HDR designation. Also, affordable rental housing can receive a higher density bonus(one unit per thousand square feet). All of these potential dwelling units are located in areas with easy road access, and city sewer and water availability.

The HDR designation is seen as a source of housing for the Very Low and Low income housing. The Plan was also revised to add more MDR areas for Low to Moderate income housing(single family ownership). The potential is for an additional 581 units(of course not all will be low to moderate income housing). Additionally, density bonuses and allowance for smaller lot sizes(to 5,000 square feet) will add to the affordable housing potential.

In summary, the adopted land use plan and housing element along with subsequent revisions to the Zoning Code will allow the City to attain their housing objectives as expressed in the general plan.

4. The analysis of the City's land use controls with respect to the Zoning Code, Resource Management System, Fees and Exactions, and Permits and Processing has been expanded. The moratoriums, as they affect housing development, have been discussed.

5. The analysis of assisted developments has been expanded. Information on each assisted unit will become part of Appendix C of the MEA. The cost analysis to preserve the units has been included as a part of Appendix C. Financing sources have been discussed further.

C. Housing Programs

In addition to programs already listed, the following programs have been added to the Draft Policy and Program Document to increase development capacity:

Goal A Implementation Programs

14. Rental Housing for very low to low income households may be allowed to develop at densities as low as one unit per 1,000 square feet in High Density Residential and Commercial Areas provided no health and safety problems would result.

15. Residential lots dedicated for ownership by low to moderate income household may have individual lot sizes as low as 5,000 square feet in Medium Density Residential and High Density Residential.

In addition to programs already listed, the following programs have been added to the Draft Policy and Program Document to remove governmental constraints.

Goal D Implementation Program

6. If feasible, the City and applicant will participate in the Joint Venture for Affordable Housing, co-sponsored by the U.S. Department of Housing and Urban Development, the California Building Industry Association, and the California Department of Housing and Community Development to consider the reduction of development standards.

In addition to programs already listed in the Policy and Program Document, the following programs have been identified for assisted rental housing:

Goal C Implementation Programs

12. The City will consult with the Napa Valley Housing Authority to ascertain if there are available administration fee reserves.

13. The City will investigate the use of any future redevelopment funds and CDBG repayment funds towards replacing and/or preserving the City's assisted rental housing stock.

HOUSING

PURPOSE AND SCOPE

This section of the MEA focuses on housing in Calistoga. Its purpose is to identify local housing needs, special needs groups, and available resources to meet those needs. Based on this information, Goals, Policies, and Programs will be prepared subsequently which will guide housing development.

PLANNING AREA DEFINITION

The documentation of housing needs and characteristics presents data for the incorporated limits and study area as described in the Regional and Local Setting of this document. The U.S. Bureau of the Census has defined one Census Tract for the City, 2020. The Tract boundaries are coterminous with the City's incorporated limits and Sphere of Influence. Census Tract 2019 surrounds Tract 2020 on all sides. Information on Tract 2019 will be considered in the analysis, as a portion is in the Study Area.

The Calistoga Study Area is located in Napa County's most prominent geographic feature, the Napa Valley. In addition to the City of Calistoga, the Valley contains three other incorporated jurisdictions, St. Helena, Yountville, and Napa. Urban development is generally concentrated in these cities.

The County's housing market is dominated by the Valley's largest urban area, the City of Napa and its urban fringe. Table H presents a comparison of dwelling unit types in each of the incorporated areas.

Overall, in 1980, the City of Calistoga accounted for approximately 7% of the total County housing stock in Napa County. The City of Napa accounted for about 80% of the County housing stock.

HOUSING STOCK

Over time, the City of Calistoga's housing stock has increased substantially. Table I presents the change in population, housing units, and household size for the period 1960 to 1989. The largest increase in housing units, 77%, coincides with the largest increase in population, 106%, which took place between 1970 and 1980. Household size has generally decreased over the last 29 years to a present level of 2.13. In 1980, there were approximately 1,825 households in Calistoga (1980 U.S. Census). Exhibit 6 presents a bar graph of the increase in units since 1960.

TABLE H
DWELLING UNIT BY TYPE OF STRUCTURE

Jurisdiction	Single-Family 2-4 Plex		5 Plex +	Mobile Home	Total
City of Napa	14,914	1,968	2,486	850	20,218
Yountville	475	32	55	229	791
St. Helena	1,510	104	537	96	2,247
Calistoga	1,085	123	270	426	1,904
TOTAL					25,160

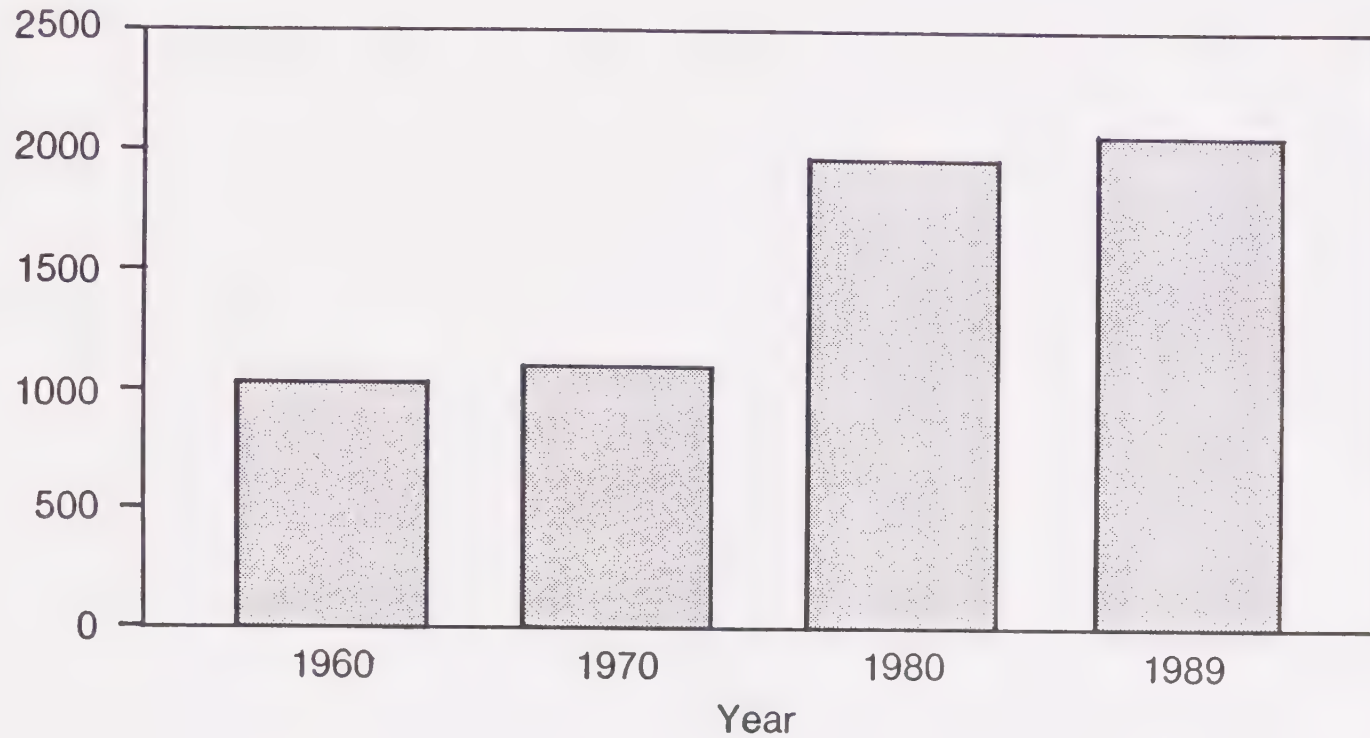
Source: 1980 U.S. Census

TABLE I
POPULATION AND HOUSING INCREASES

Characteristic	1960	1970	% Change	1980	% Change	1989	% Change
Population	1,514	1,882	24%	3,879	106%	4,386	13%
Household Size	2.54	2.69	6%	2.12	-21%	2.13	.5%
Housing Units	1,042	1,106	6%	1,964	77%	2,074	5.6%

Sources: 1960, 1970 and 1980 U.S. Census
California Department of Finance, January 1989

Number of Housing Units



Source: US Census & California Department of Finance

HOUSING BAR GRAPH

MASTER ENVIRONMENTAL ASSESSMENT
City of Calistoga

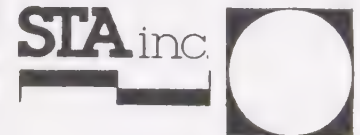


Exhibit 6

In 1980, The City contained approximately 1,964 housing units. 1,904 of the units were year-round housing units. In January 1989, the number of units increased to 2,074 with 2,022 being occupied on a year-round basis. Table J summarizes the number of housing units by type in 1980 and in 1989 the most recent estimate for the City. As the housing unit figures indicate, the City of Calistoga contains a variety of housing types with a dominance of single family dwellings.

Census Tract 2019 contained a smaller amount of housing units in 1980 though it occupies a larger area. Table J summarizes the unit types for Tract 2019. A predominance of single family units also exist in Tract 2019.

New construction within Calistoga was minimal in 1987 and 1988 due to the moratorium on water and sewer hookups. During 1987 to 1988, 31 single family units were built. The number and type of units built in the 1988 to 1989 year include nine single family detached homes and one 4-plex structure.

HOUSEHOLD CHARACTERISTICS

Tenure and Length of Residence

Table K summarizes tenure and length of residence, and overcrowding for the planning area. A majority of residents in 1980 were fairly recent arrivals to the City of Calistoga and surrounding area, with most households having a length of residence between two and five years. A majority of the units are owner occupied in both tracts.

Overcrowding

The Census defines overcrowding as more than 1 person per room. Approximately 7% of a total 1,791 occupied housing units in Tract 2020 reported more than 1.01 person per room. Of 483 occupied housing units, 4% reported more than 1.01 persons per room in Tract 2019.

Household Financial Characteristics

As Table L indicates, the median income for Tract 2020 and Tract 2019 differed in 1980. The median income for the City of Calistoga equalled approximately half of the median income of Tract 2019, \$10,873 versus \$20,437. ~~May 1989 estimates of income in Napa County are summarized in Table M. Table M summarizes the current incomes necessary to qualify for affordable housing built with subsidies.~~

A household classified as very low income earns 50% of the median income. A low income household earns between 50% and 80% of the median income. A moderate income household earns between 80% and 120% of the median income. For a household

TABLE J
HOUSING UNITS

Unit Type	TRACT 2020		TRACT 2019
	1980	1989	1980
Single Family (1)	1,085	1,210	452
2 to 4 Plex	123	103	89
Multi-Family (2)	270	313	11
Mobile Home	426	448	--
TOTAL (Year-round)	1,904 (3)	2,074	552

Source: 1960, 70, and 80 Census
Department of Finance, January 1989

Notes:

- (1) Detached and attached units.
- (2) Includes structures with 5 or more dwelling units.
- (3) The number of Year-round units on Table H-1 of the Census is reported as 1,911. The Total above appears on Table H-7 of the Census and is based on a sample.

TABLE K
HOUSEHOLD CHARACTERISTICS

	TRACT 2020	TRACT 2019
CHARACTERISTICS	1980	1980
Average Household Size	2.12	2.54
Length of Residence		
1 Year	512	79
2 - 5 Years	679	171
6 - 10 Years	374	147
11 + Years	226	37
Persons Per Room		
1.00 or less	1,666	463
1.01 to 1.5	27	17
1.51 or more	98	3
Owner Occupied Units	1,090	348
Renter Occupied Units	701	135
Owner - Occupied Households	1,144	321
Renter - Occupied Households	681	167

Source: 1980 U.S. Census

TABLE L
FINANCIAL CHARACTERISTICS

	TRACT 2020	TRACT 2019
	1980	1980
Median Income	\$10,873	\$20,437
Mean Income	\$22,519	\$23,918
Median Contract Rent	\$185	\$178
Median Gross Rent	\$209	\$187
Median Monthly Homeowner Costs		
With Mortgage	\$430	\$540
Not Mortgaged	\$92	\$135
Source:	1980 U.S. Census	

TABLE M
MAY 1989 INCOME LIMITS
NAPA COUNTY

Standard	NUMBER OF PERSONS IN FAMILY							
	1	2	3	4	5	6	7	8
Very Low Income	13,600	15,500	17,450	19,400	20,950	22,500	24,050	25,600
Lower Income	21,750	24,850	27,950	31,050	33,000	34,950	36,900	38,800
Median Income	27,150	31,050	34,900	38,800	41,250	43,650	46,100	48,500
Moderate Income	32,600	37,250	41,900	46,550	49,450	52,400	55,300	58,200

Source: Department of Housing and Community Development, May 1, 1989

TABLE N
1980 AND AVERAGED INCOME PROPORTIONS

Income Group	City	County	Region	Averaged
Very Low	48%	26%	23%	32%
Low	19%	18%	16%	18%
Moderate	17%	21%	21%	20%
Above Moderate	16%	35%	40%	30%

Sources: ABAG
City of Calistoga, Memorandum, ABAG Housing Needs Determinations

of four persons, the median income limit is estimated to be \$38,800 annually. The same size household classified as very low income, earns approximately \$19,400. These figures are not comparable to the Census figures since the median income in the Census is not broken down by persons per household. Table N indicates the percentages of households in the City in each category. As indicated, the largest income group in the City consists of very low income households, 48%.

The City's percentages are modified by County and Regional percentages to promote a more equitable distribution of housing opportunities and to avoid further compaction of communities with higher concentrations of low income households. The City's very low income percentage is adjusted downward to 32% reflecting the fact that it has a higher proportion of lower income households than the County or region. Similarly, the above moderate income percentage is adjusted significantly upwards to account for the lower proportion of these households in the City. The averaged percentages are then used to project housing needs by income category. Projected housing needs are discussed further in the latter portion of this section.

According to State law, a lower-income household that pays more than 25% of its income for housing is living in unaffordable housing. The federal government's measure of overpayment is 30% of a households income. ABAG has calculated the percentages of low income homeowners and renters that are overpaying for housing based on the 1980 Census. Table O indicates that 22% of Calistoga's low income homeowners are overpaying for housing services. In addition, 68% of the City's low income renters are overpaying for housing services. Overall, 45% of the City's low income residents overpay for housing services.

The median contract rent equalled \$185 in 1980. Current ranges of contract rents are provided in Table P. These figures assume that the unit is of average to upgraded quality. As indicated, rental prices range from a minimum of \$375 to \$1,000 a month. Local Calistoga realtors describe the rental unit market as "tight." Units are usually rented quickly.

Values of single family homes have risen since the 1980 Census. The median value of owner occupied units in the City equalled \$77,000 in 1980. A current price estimate (October, 1989) provided by St. Helena Realty is as follows:

3 Bedroom/2 Bath Home	\$155,000 to 165,000
-----------------------	----------------------

Rents and current selling prices are not directly comparable to Census figures which did not specify rents and values for different sizes and types of units.

TABLE O
OVERPAYMENT, CITY OF CALISTOGA

Characteristic	Number
# of Low Income Households Owning	589
# of Low Income Households Renting	554
# of Low Income Households Overpaying (Owners)	131
# of Low Income Households Overpaying (Renters)	375
Proportion of Low Income Owners Overpaying	0.22
Proportion of Low Income Renters Overpaying	0.68

Source: ABAG, Housing Needs Determinations, September 1988

TABLE P
1989 CONTRACT RENTS

Unit Type	Rental Price Range
Single Family Home	
1 Bedroom	\$500/month
2 Bedroom	\$625 - \$650/month
3 Bedroom/2 Bath	\$850 - \$1,000/month
Apartments	
1 Bedroom	\$375 - \$425/month
2 Bedroom	\$575 - \$625/month

Source: St. Helena Realty, October 1989
Beck and Taylor, November 1989

SPECIAL NEEDS GROUPS

Handicapped

Within the Census, a disabled household is one in which the householder has an employment-related or transportation-related disability. In California, approximately one in seven of the state's households had a disability. In general, disabled households have the following characteristics (Statewide Housing Plan 1987):

- Tend to be small
- Tend to be elderly
- Are predominantly low income
- Move much less often
- Have below average housing costs, but, nevertheless, pay higher percentages of income for housing

In Calistoga, 44 persons aged 16 to 64 years reported a public transportation disability, and 44 persons in the same age group reported a work disability. Persons 65 years and older with a public transportation disability totalled 56. In total, persons with either disability represent 2.3% of Calistoga's population.

In Census tract 2019, which surrounds the City, fewer persons reported a disability. Between the ages of 16 and 64, seven persons reported a public transportation disability and seven reported a work disability. Twenty persons aged 65 years and over reported a public transportation disability.

In order to gather more current estimates regarding the handicapped in the County of Napa and City of Calistoga, the following agencies were contacted:

- Napa County Social Service Human Service Directory
- St. Helena Social Service Office
- Catholic Napa Valley Family Housing
- Napa Action Community
- Napa County Human Services
- State Employment Development Department
- Napa Valley Housing Authority
- Social Security Administration, County of Napa
- State Department of Rehabilitation

The Napa Valley Housing Authority gives 46 After Care certificates/vouchers for the disabled in Napa County. More specific information related to the City of Calistoga is not available (phone interview, Dave Dickson, Napa Valley Housing Authority, September 4, 1990).

As of 1987, 430 persons were receiving disability income in Napa County (phone interview Nancy Vice, Social Security Administration, County of Napa, August 23, 1990). No specific information was available for the City of Calistoga.

The Draft Housing Opportunity Strategy prepared for the Napa Valley Housing Authority indicates that ..."the lack of housing geared for special needs populations such as the homeless, mentally ill and physically and developmentally disabled was highlighted by the Napa Housing Alliance and County Staff as being a significant problem.

Currently, the following programs for the handicapped are provided in the County of Napa:

<u>Organization</u>	<u>Service</u>
<u>County Social Service</u> <u>Service</u> <u>Human Service</u> <u>Directory</u>	<u>Services for the physically handicapped</u>
<u>Napa Action Community</u>	<u>Meals on Wheels</u> <u>Food Bank</u>
<u>State Dept. of Rehabilitation</u>	<u>Vocational Aid</u> <u>Directory of Rehabilitation Places and</u> <u>Services to the handicapped</u>

No social programs for the handicapped are located in the City of Calistoga. No housing developments have been built specifically for disabled community members. Programs to aid in the development of housing for the handicapped in Calistoga are listed in the Policy and Program Document, Volume II of the General Plan Update.

Elderly

Within State law, elderly is defined as age 60 and older. Almost 25% of the households in California are made up of the elderly. General characteristics of elderly households are as follows (Statewide Housing Plan 1987):

- Have a higher homeownership rate
- Are predominately low income
- Tend to live in small households

- Are more likely to be nonfamily households
- Move much less often
- Have much lower overcrowding rates

With increasing age:

- Household income, household size and homeownership begins to fall
- Housing affordability problems begin to increase

The elderly make up a major percentage of the population in Calistoga. As estimated in the 1970 Census, they represented 42% of the population. This percentage decreased slightly in 1980 Census estimates to 39%. Further discussion is provided in the Population section of the MEA. The 1980 Census reported 1,572 persons aged 60 years and over within the City. In Tract 2019, 311 persons were aged 60 years and over.

The elderly tend to live in the City's mobile home parks. With increasing age, many elderly need services provided by convalescent care facilities. There is a shortage of space in the existing facilities. To find these services, the elderly are forced to move to different localities (Richard Spitler, Planning and Public Works Director, November 7, 1989). In 1980, 629 of 812 housing units were occupied by elderly home owners (65-years and over).

Of 93 Calistoga families earning below the poverty level in 1979, 16 families or 17% had a householder aged 65 years and over. Of 485 persons with incomes below the poverty level in 1979, 142 or 29% were aged 60 years and over.

In order to gain more current estimates regarding the elderly in the County of Napa and the City of Calistoga, the following agencies were contacted:

- County Social Service, Human Service Directory
- St. Helena Social Service Office
- Catholic Napa Valley Family Housing
- Napa Action Community
- Napa Valley Housing Authority
- Social Security Administration
- Volunteer Center Housing

No quantitative descriptions of elderly housing needs were provided.

The Draft Housing Opportunity Strategy prepared for the Napa Valley Housing Authority includes results of interviews with several Napa County housing providers, municipal staffs, local realtors elected officials and others. Results indicate that those interviewed cited senior housing less frequently as a pressing need ". . . perhaps because senior

developments have been built in Napa in the last several years" (Draft Housing Opportunity Strategy, Napa Valley, Housing Authority, June 1, 1990).

Programs for seniors are listed in the 1989-90 Guide for Seniors distributed by the Volunteer Center of Napa County, Inc. Services available within the City of Calistoga include a Nurses Registry, Health Screening Services (Community Presbyterian Church), Seniors Meetings, and Creative Living Center meetings at the Calistoga Community Center. No senior housing complexes are located in Calistoga.

Statistics discussed above indicate that the elderly make up a significant part of Calistoga's population. Given the shortage of board and care facilities, convalescent care facilities, as well as affordable rental and sale units, senior housing is a pressing need for the City of Calistoga.

Large Families

Large households, defined in the 1980 census as households with five or more persons, have special housing needs. Large households tend to have difficulties purchasing housing because large housing units are rarely affordable and rental units with three or more bedrooms may not be common in many communities (LHEAP, December 1989).

In general, household size in Calistoga has remained fairly low. Household size is summarized on Table I. In 1980 the average persons per family equalled 2.70. Persons per household is expected to decrease over the next fifteen years to 1.96 by the year 2005 (Projections '87 ABAG). In Calistoga, 109 units contained five or more persons. The median number of persons per owner-occupied units equals 1.87. The median number of persons in renter-occupied units is slightly lower at 1.79 (1980 U.S. Census). Average household size in Tract 2019 is slightly higher at 2.54 persons (1980 U.S. Census).

As a subgroup, Calistoga's Hispanic population has a higher household size and a higher family size than the general population. In 1980, household size for Hispanic residents equalled 3.67. The number of persons in a family on average equalled 4.15 (1980 U.S. Census).

Farmworkers

Housing for farmworkers presents problems due to rural locations, seasonal nature of the work, and the need for mobility on the part of many of the workers. Of California households, .9% included farmworkers. This only represents farmworkers within a household at the time of the Census and underestimates farmworkers within the State. The following are distinctive characteristics of California's farmworker households (Statewide Housing Plan 1987):

- They have low homeownership rates
- They have large household sizes, and renter households are as large as those of owners
- Married couples strongly predominate among both owners and renters, and most families include minor children
- They live disproportionately in the housing which is in the poorest condition
- They tend to have low incomes and have high rates of poverty
- They have high rates of overcrowding

The 1980 U.S. Census reported that 225 persons in Calistoga were employed in farming, forestry, and fishing occupations. Many who work in farming are of Hispanic descent. As discussed in the Population section of the MEA, the Hispanic population in Calistoga has increased from less than 8% in 1970 to 18% in 1980. The increase in the Hispanic population is a result of opportunities in agricultural businesses and related services. 80% of the Hispanic population is in the low and moderate income group. The majority live in low quality rental housing in overcrowded conditions. In Tract 2019, 126 persons or 10% of the population are of Hispanic descent (1980 U.S. Census).

At peak times during the harvest season, as many as 300-400 migrant farm workers come to the City. Units are rented to them for short periods of time, five to six weeks. During this time they live in overcrowded conditions in order to afford the rental price which is often up to \$500 per month. These units are not normally rented on the general housing market and are not advertised (Ernest Volkman, phone interview, November 14, 1989).

Further information on farmworkers was gained through the Napa Valley Housing Authority. A preliminary survey of farmworkers in the Valley estimates that at the peak harvest time, 1,000 single male migrant farmworkers need housing (phone interview, Dave Dickson, Napa Valley Housing Authority, August 24, 1990). The Department of Housing and Community Development estimated 730 migrant farmworkers during the peak harvest month of September (State of California, Department of Housing and Community Development, 1988).

The Draft Housing Opportunity Strategy prepared for the Napa Valley Housing Authority (June 1, 1990) recommends that "[t]he Authority's first farmworker project should be targeted to year-round farmworker families, and due to proximity to the job site, be located in either Calistoga or St. Helena . . . Subsequent efforts can focus on the housing needs of single men, and perhaps be located in the unincorporated County, near or at the job site."

Programs regarding farmworker housing in Calistoga are included in the General Plan Update Volume II: Policy and Program Document.

Female Heads of Households

Approximately 10% of California's households are made up of a female householder with children. Female householders with families have the following characteristics (Statewide Housing Plan 1987):

- They have a low homeownership rate
- They tend to be younger
- Families with children predominate
- They have low incomes and a high poverty rate
- Overcrowding rates are high
- They pay high percentages of income for housing

The 1980 Census reported 98 female headed households in Calistoga, 62 of which had children under 18 years of age. The 1983 Housing Element reported that 5.4% (99) of Calistoga's households consisted of female-headed households. In Census tract 2019, 30 households consisted of females with no husband present, 15 of which had children under 18.

Of 93 families below the 1979 poverty level in Calistoga, 22 households or 24% were female headed households with children under 18 years of age. In tract 2019, 4 of 24 families below the poverty level in 1979 were female headed households with minor children. This is 16% of the low income families within the tract.

Homeless

The homeless include single persons and persons with families who spend the night in emergency shelters or hotel or motel rooms with the aid of emergency shelter vouchers, as well as those actually on the streets. The 1987 Statewide Housing Plan includes an estimate of between 50,000 to 75,000 homeless persons in California.

Prior to assisting homeless persons and families find employment and obtain housing, transitional assistance in the form of emergency food or shelter may be needed. No formal shelters for the homeless exist in Calistoga. No homeless persons have remained in the City for long periods of time, but tend to seek shelter for a few days. Over a year, 40 persons and more may seek shelter especially at churches. If a shelter existed in Calistoga, it is estimated that it would be full every night (Ernest Volkman, phone interview, November 14, 1989). Every locality with an identified unmet need of one or more homeless persons must identify adequate sites for emergency shelters and transitional housing including existing facilities which can be converted to accommodate that need (Government Code Section 65583(c)(1)).

Transients in Calistoga tend to be males, although a couple with a child or two has sometimes sought shelter. Single transient women have not been seen (phone interview, Ernest Volkman, November 28, 1989).

HOUSING STOCK CONDITIONS

Table Q summarizes housing stock conditions for the planning area. A majority of the units were constructed subsequent to 1960, approximately 59% for Tract 2020 and 47% for Tract 2019. Units lacking heating fuel were few, approximately .5% in Tract 2020. Units lacking complete plumbing for exclusive use equalled approximately 1% of all year round units in both Census tracts.

A more recent study in the City of Calistoga indicates that the housing stock condition may still need improvement. In 1984, a Sidewalk Survey was conducted to assess the condition of Calistoga's housing units in a specified target area which contained 1,178 units. 967 or 82% of the units were surveyed. Of the 967 units, 508 units were classified as Substandard Major and Substandard Moderate. This survey was updated through record and field checks in 1987 and included the entire City in the analysis. In 1987, the total number of Major and Moderate Substandard units in the target area equalled 542. Of these, 365 were listed in need of "major" repairs. This definition would include units in need of replacement (memorandum, Richard Spitler to STA Planning, Inc., September 4, 1990).

A demographic survey of the substandard units was carried out in 1987. Of the 542 units identified as substandard, 210 were given questionnaires. Results are presented in Table R. Approximately 25 homes lacked heat. In addition, many homes cited other building problems concerning plumbing, wiring and foundation among others. The results of this survey are not directly comparable to Census figures since the total number of respondents, 210, is a small fraction of the total households in the City. Survey results are, however, a more recent indicator of housing stock condition.

The City maintains a housing rehabilitation program funded by the California Community Development Block Grant program. The grants are awarded based on need. The Sidewalk Survey and Demographic Survey demonstrated the City's need to upgrade many units.

On April 12, 1989, the Daily Calistogan reported that during the period of June 1985 to December 1988, approximately \$579,000 was spent to rehabilitate 22 units. Of these, half of the homeowners were classified as low income. 52% of the low income group were Hispanic and 47% were female heads of households. One percent of the applicants were classified as handicapped.

TABLE Q
HOUSING STOCK CHARACTERISTICS

	TRACT 2020	TRACT 2019
CHARACTERISTIC	1980	1980
Year Structure Built		
1939 and earlier	367	148
1940 to 1959	415	142
1960 to 1979	1,122	262
Units Lacking Heating Fuel	8	--
Lacking Complete Plumbing for Exclusive Use (Year Round)	22	6

Source: 1980 U.S. Census

TABLE R
1987 SURVEY RESULTS, CITY OF CALISTOGA
HOUSING STOCK CHARACTERISTICS (1)

CHARACTERISTIC	NUMBER OF SURVEY RESPONDENTS
Homes without Heat	25
Building Problems	
Plumbing	51
Wiring	45
Walls	52
Roof	48
Foundation	38
Insulation	64
Heating System	66
Stairway	32
Windows	40
Doors	53
Need More Room	78

Source: City of Calistoga Housing Rehabilitation Department Updated Demographic Survey, March 1987

Notes:

(1) Total of 210 responses to the Survey.

Overall, the Program has rehabilitated approximately 112 units since its beginning in 1984. Property owners of rental units must agree to rent to low and moderate income households for the term of the loan, usually 15 years. Most of the eligible units have been rehabilitated. Over the life of the program, 125 houses will be renovated (Daily Calistogan, April 7, 1989). The program will reduce in intensity in June of 1990 since additional grants from the State of California are not anticipated (Richard Spitler, Planning and Public Works Director, November 7, 1989).

Some problems with CDBG loan term requirements have been identified regarding retaining rental units for prior occupants. Subsequent to rehabilitation, unit owners may allow occupants to return for a month or two but then terminate the families without cause. Future CDBG loan agreements or other similar types of rehabilitation assistance agreements should include clauses which require unit owners to retain the families that occupied the units prior to rehabilitation (phone interviews, Maria Rodriguez - Welch, December 11, 1989).

Demolitions have been few in the last two years. In 1988, nine structures in the 2-4-plex range which housed 26 units were demolished. These units were not included in ABAG's estimate of current housing needs for the period 1988-1990. ABAG's formula does not account for demolitions (phone interview, Raymond Brady, ABAG, August 21, 1990). In 1987, one single family detached unit was demolished and 7 units in the 2 to 4 plex unit type were demolished. This information was provided by the California Department of Finance. Calistoga's Housing Department reports that in November 1988, 32 substandard units were demolished which displaced 150 people. Those displaced have been assimilated slowly (phone interview, Pat Rusch, October 6, 1989).

VACANCY RATES

The current overall vacancy rate for the City in 1989 equals 2.51% according to the Department of Finance. The vacancy rate includes seasonally occupied units which may tend to inflate the vacancy rate.

Current (1989) vacancy rates for rental units in Calistoga equal less than 1% according to Saunders Real Estate. This is the vacancy rate for the 60 units that the office manages. The office never has a vacancy for more than two weeks. Mt. St. Helena Realty manages 20 units of which less than 5% are vacant at a maximum at any one time. These units are also rented very quickly. Vacancy rates for all rental units in the City are not available.

Though rental vacancy rates are low overall, seasonally it may vary. Vacancy rates tend to be higher in December. The housing market is driven in part by transient workers (phone interview, Robert Beck & Taylor, Napa Valley Realty, November 21, 1989).

EXISTING AND PROJECTED HOUSING NEEDS AND CONSTRAINTS

Population Trends

Table G in the Population section summarizes several different growth scenarios. Estimates range from 5,954 to 8,225 additional persons by the year 2010. In any case, at a minimum, 1,558 persons will be added to Calistoga's current population of 4,386. Due to water and sewer capacity constraints, a maximum of 54 units per year can be provided until the year 1995. At current average household sizes, this will house approximately 115 persons a year. ABAG's population projections, one growth scenario in the Population section of the MEA, were used in determining Calistoga's housing needs.

Employment Trends

ABAG predicts steady or increased number of jobs in most employment categories. Table OO in the Employment section of this document indicates the employment projections up to 2005. In general, job opportunities will increase in manufacturing and wholesale, retail, and service sectors. Agricultural and mining jobs will remain fairly steady until 2005 when they will decline slightly. Increased employment opportunities in Calistoga may contribute to increases in population. This information from Projections '87 was used in determining Calistoga's housing needs.

Existing and Projected Housing Needs

In January 1989, the Association of Bay Area Governments (ABAG) published its assessment of Regional Housing Needs. The existing need for housing in Calistoga is 28 units. Six factors are assumed in ABAG's estimate of existing and projected need:

- Market Demand for Housing
- Employment Opportunities
- Availability of Suitable Sites and Public Facilities
- Commuting Patterns
- Type and Tenure of Housing
- Housing Needs of Farmworkers

The calculation of existing housing need is the difference between the number of units actually available in the jurisdiction and the number that should have been available based

on an optimal vacancy rate. The "optimal" rate assumed by ABAG is 4.5%. This rate is a goal for the Bay Area Region.

Calistoga's housing needs were originally estimated at 493 units. ABAG's calculations were based on the assumption that infrastructure constraints to growth would be resolved by 1990 which has not occurred. Upon receipt of ABAG's September 1988 Housing Needs Determinations (which were based on Projections '87), the City analyzed water and sewer infrastructure constraints. It was shown that future annual water allocations limit construction of housing to 54 units per year until 1995 (memo, Richard Spitler, Planning Director, to City Council, November 30, 1988). Based on this analysis, estimates of housing need were lowered to 310 units. In their revised January 1989 Housing Needs Determination, ABAG accepted this reduced figure.

Table S provides a break down of the projected need by time frames. The 1988-90 projected need is 29 units. The 1990-95 projected need equals 281.

As discussed previously new construction in the City included nine single family detached units and one 4-plex structure. Of these units none are considered affordable. The number of units that must be provided in each income category is listed on Table T. As indicated, the majority of units must be provided for very low income households and above moderate income households, 99 and 93 units respectively.

Governmental Constraints

Governmental constraints refer to any ordinances and policies that are excessively restrictive and that constrain the maintenance, improvement or development of housing. Each city ordinance or plan related to housing is analyzed below for constraints.

Calistoga General Plan

Several General Plan Elements directly or indirectly regulate housing maintenance and/or development. The Land Use Element establishes residential designations and densities as follows:

- Rural Residential (0 - 1 d.u./net acre)
- Lowest Density Urban Residential (0 - 5 d.u.'s/net acre)
- Medium Density Urban Residential Range (5 - 12 d.u.'s/net acre)
- Highest Density Urban Residential Range (5 - 20 d.u.'s/net acre)

TABLE S
EXISTING AND PROJECTED HOUSING NEEDS
CITY OF CALISTOGA

Time Frame	Need	
Existing Need	28	
1988-90 Projected Need	29	
1990-95 Projected Need	281	
TOTAL PROJECTED NEED		310

Source: ABAG, Housing Projections, January 1989

TABLE T
PROJECTED HOUSING NEED BY INCOME CATEGORY

Category	Number of Units
Very Low	99
Low	56
Moderate	62
Above Moderate	93

Source: ABAG, Housing Projections, January 1989

Currently, a substantial amount of land is designated for Rural Residential uses. Little land is zoned for higher density uses. The emphasis on larger parcels presents a constraint to the development of affordable housing which tends to be built at higher densities.

Several Land Use policies influence residential development within the City through design requirements and relationship to public service provisions. Design requirements include, but are not limited to, consideration of designs harmonious with the hillside environment. Public services provisions include prohibition of subdivision development unless there will not be an overcrowding of students on any educational level as well as other public service requirements. These policies are not excessively restrictive to the development of housing.

Conservation Element policies include requiring dedication of land for parks or the payment of in lieu fees, and adequate yards and setbacks. Parkland dedication and development standards are discussed in the Fees and Exactions and Subdivision Code analysis.

Housing Element goals and policies promote the maintenance and development of housing. Some policies have not been implemented such as an annual update of the housing condition inventory. Housing condition surveys have been updated every few years. Many housing programs have not been utilized. Housing program implementation is described in further sections.

Calistoga Zoning Code

The Zoning Code provides regulations regarding uses, densities, lot standards, heights, setbacks, parking, signage, and other issues. Several residential designations are described on Table U. Multi-family units, which tend to be more affordable than single-family units, are permitted in three zones. As a percentage of zoned acres, higher density designations (e.g. R-2 and R-3) make up only 1.4% of the total vacant parcels within the City. The little amount of land designated for higher densities in conjunction with infrastructure limitations have functioned as a constraint to housing development during the last several years. This is discussed further within the Vacant Land Survey section.

Zoning densities do not appear to restrict affordable housing development. Maximum density for the R-2 and R-3 zones is one dwelling unit per 1,000 square feet of land area. In addition, the Planned Development district allows some flexibility in whether higher or lower development standards will be required for the combining district. Densities may increase in some cases, but not more than 10% over the density permitted in the combining district.

TABLE U
RESIDENTIAL DENSITY DESIGNATIONS

Current Zone District	Resid. Uses Permitted	Minimum Building Site Area	<u>Maximum Coverage</u>	Building Height(1)	<u>Front</u>	<u>Setbacks</u> <u>Side</u>	<u>Rear</u>	Resident Parking	Density	Current General Plan Designation	Density
A-E	One-family dwelling per legal lot	5 acres (min. lot size)	<u>5%</u>	35'	<u>100 ft.</u>	<u>50 ft.</u>	<u>100 ft.</u>	2 spaces/d.u.	1 single family/ legal lot	RR	(0-1 d.u./ acre)
R-R	One-family dwelling	1 acre	<u>40%</u>	40' max	<u>20 ft.</u>	<u>15 ft.</u>	<u>20 ft.</u>	2 spaces/d.u.	same as General Plan	RR acre)	(0-1 d.u./ acre)
R-1	One-family	6,000 s.f. 7,000 s.f. on corner lots	<u>40%</u>	35'	<u>20 ft.</u>	<u>(3)</u>	<u>20 ft.</u>	2 spaces/d.u.	same as General Plan	LD Low	0-5 d.u./ acre)
R-2	One-family duplexes Multi-family	same as above (lot size increases as density increases)(4)	<u>60%</u>	70'	<u>20 ft.</u>	<u>(3)</u>	<u>15 ft.</u>	2 spaces/d.u.	same as General Plan	MD Medium	(5-12 d.u./ acre)
MD: MHP	Mobile Homes	2,800 s.f./space	<u>60%</u>	N/A	<u>10 ft. avg.</u>			Mobile Home Park 1.5 times the # of homes	8 d.u./acre	MD Medium	(5-12 d.u./ acre)
R-3	single family multi-family	6,000 s.f. (7,000 on corner lot)(4)	<u>75%</u>	No Std.	<u>15 ft.</u>	<u>5 ft.</u>	<u>(5)</u>	2 space/ d.u.	same as General Plan	HD High	(5-20 d.u./ acre)

TABLE U
RESIDENTIAL DENSITY DESIGNATIONS

Current Zone District	Resid. Uses Permitted	Minimum Building Site Area	<u>Maximum Coverage</u>	Building Height(1)	<u>Setbacks</u>			Resident Parking	Density	Current General Plan Designation	Density
					<u>Front</u>	<u>Side</u>	<u>Rear</u>				
PD	multi-family	N/A(2)	<u>N/A(2)</u>	N/A(2)	<u>N/A(2)</u>	<u>N/A(2)</u>	<u>N/A(2)</u>	N/A(2)	Flexible	PD	Flexible

Source: City of Calistoga Zoning Code

- Notes:
- (1) General Zoning Code Provisions include a maximum permissible height of 30 feet.
 - (2) Depends on the base district.
 - (3) Setback requirement: ½ the height of the building.
 - (4) No more than one dwelling unit/one thousand square feet of land area.
 - (5) 5ft./1 story, 10ft./2 story, 15ft./2+ stories.

Parking requirements generally allow for 2 spaces/dwelling unit. Parking requirements can function as a constraint to housing development since land devoted to off-street parking can reduce the area available to construct dwellings. The City of Calistoga does not have access to a public transportation system. Only taxi service and Greyhound bus service exists. In addition, inadequate bicycle and pedestrian facilities have been noted in the Transportation/Circulation Section of the MEA. Until adequate transportation and circulation facilities are developed, parking requirements will likely remain the same. Programs to mitigate this problem have been included in the General Plan Update Volume II: Policy and Program Document. Please refer to the Land Use and Circulation Elements.

Height limits would allow for approximately 5-6 stories maximum in the R-2 district. No standard is given in the R-3 district. Maximum lot coverage regulations coupled with the height restrictions limit the design and densities of a given project. In order to increase project design flexibility, the Zoning code includes a Planned Development designation.

The City's Zoning Code complies with state laws requiring protective zoning for mobile homes (Chapter 17.19, Calistoga Zoning Code). The Zoning Code should be amended to allow manufactured housing in single-family zones and mobile home parks in land planned for residential uses. ~~and~~ The code does comply with laws requiring provisions for second units (Chapter 17.37, Calistoga Zoning Code). Mobile homes and second units or "granny flats" provide more affordable housing especially for senior citizens.

The Zoning Code will be amended to be consistent with the adopted General Plan. Descriptions of General Plan Land Use designations indicate the development standards and densities for each area. The Zoning Code will reflect these standards.

Calistoga Subdivision Code

The Subdivision Code of the City of Calistoga provides regulations pertaining to properties divided for the purpose of sale, lease or financing whether immediate or future. Included are standards relating to design, improvements, dedications, tentative maps, final maps, soil reports and other issues. Setbacks, street width, and other requirements may reduce the area available for site development. Street width standards are shown on Exhibits 11 through 14 in the MEA Traffic/Circulation section. The local street width standards, including two travel lanes and two parking lanes, equals 36 feet. With sidewalks and easements, total right-of-way width equals 56 feet. Curbing requirements are general: "concrete curbs and gutters shall be required and sidewalks may be required along all streets and highways" (Section 16.12.010.(D) Subdivision Code).

Open space requirements are vague as seen on Table V. The General Plan provides for 5 acres of parks per 1,000 population. Please refer to the Open Space Element.

Allowing for easements instead of rights-of-way would increase the total area considered for site development. Relaxing other standards such as allowing rolled curbs or curbless sidewalks would decrease development costs.

Development projects are required to comply with all applicable standards and procedures. Exceptions to some regulations may be allowed if the following facts are found:

1. That there are special circumstances or conditions affecting said property;
2. That the exception is necessary for the preservation and enjoyment of a substantial property right of the petitioner;
3. That the granting of the exception will not be detrimental to the public welfare or injurious to other property in the territory in which said property is situated.

A program intended to increase development standard flexibility is provided in General Plan Update, Volume II: Program and Policy Document.

Since 1964, there have been no substantial changes in the Subdivision Code. This slows the permit process. In order to meet state standards, the Code should be updated.

Building Code

The City of Calistoga has adopted the Uniform Housing Code, 1985 Edition, with some modifications. In addition the City has adopted the 1985 Dangerous Building Code, the 1985 Plumbing Code, the 1985 Uniform Mechanical Code, and the 1984 National Electric Code. On January 1, 1990, the City will adopt the 1988 Uniform Building Code.

In general, buildings are inspected when a permit is issued or when a complaint is filed. If violations are found, a letter is sent to the building owner. Depending on the degree and type of violation, a time period is specified when a notified owner must comply.

While building codes provide minimum health and safety standards through regulation of building construction, increasing regulations that accompany each successive code may place a burden on the construction of affordable housing. The City through other ordinances and programs has tried to lessen burdens on developers of affordable housing by reducing some fees, for example, infrastructure fees of the Resource Management System.

Resource Management System

The City adopted a Resource Management System (RMS) in 1984 and has periodically amended it, most recently in June 1987. Currently an amendment is under consideration by the City. The RMS has served as a method to control residential, commercial and industrial growth in order to respond to the water and wastewater facility shortages. It establishes a schedule of water consumption for proposed developments. Specific regulations are provided in the Land Use section of the MEA.

Assuming current water consumption rates and sewage treatment capacity problems, 54 dwelling units a year can be constructed accommodating approximately 115 persons using current household size figures. Recently, On July 10, 1990, the City has enacted extended a water and sewer permit moratorium (Ordinance 442) until certain deficiencies in water provision and sewage treatment can be corrected. The ordinance will remain in effect until January 11, 1991.

The City Council may grant an exception to the water and sewer permit moratorium under the following conditions:

1. The proposal meets the City's mandated guidelines for affordable housing and is endorsed by the Napa Valley Housing Authority;
2. The project funds City sewer treatment expansion in excess of its needs;
3. The project provides the City with an acceptable fresh water source in excess of its needs; and
4. The project is subject to the provisions of the City's Resources Management System, particularly its growth management aspects.

The moratorium should not affect affordable housing development. It may have a short-term effect on the production of market-rate housing.

As of September 1990, the City has completed the following steps in order to respond to water and sewer capacity problems:

- The City Council has accepted bids and authorized construction to proceed on the Kimball Water Treatment Plant Improvements, and has requested a proposal from the contractor to construct the Clarifier additional to the project concurrent with the other improvements; and

- The City Council has authorized its engineers to proceed with design improvement work for six of the priority items required in the May 1988 Sewer Treatment Plan Improvement Plan; and
- The City Council has authorized staff to proceed on preparing cost estimates to correct a number of deficiencies in the City's water and sewer infrastructure systems.

At 54 units per year for five years, the City cannot meet its housing objectives as determined by ABAG. The City would be 40 units short of meeting its total objective, but may be able to meet the very low to moderate housing objectives. Policies and programs regarding water conservation and water source development are provided in the General Plan Update Volume II: Policy and Program Document (refer to the Circulation and Conservation Elements).

The current RMS provides allowances for low-moderate and senior housing project bonuses through three methods. One, a twenty-five percent density bonus may be granted along with waiver of the one-time water connection fees, water treatment fees or building permit fees. All other fees are to be paid in full. Two, a reduction of twenty-five percent of one-time water treatment development and building permit fees may be granted. Three, mother-in-law or second unit conversions/constructions may pay reduced water development service connection fees (50% reduction) and no sewer development fees.

The proposed RMS amendment will provide the following fee reductions for affordable housing: the City may grant a twenty-five (25%) reduction in the water and sewer development fees; and, granny unit or second unit conversions/constructions may receive a fifty (50) percent reduction in water development service connection fees and sewer development fees. Provisions for density bonus increases have been omitted.

While the current Housing Element policies support the provision of density bonuses and other incentives, percentages are not specified in any of the City's codes. California Government Code Section 65915 et. seq. require localities to institute density bonus provisions for developers who provide low or moderate income housing; or, the City may provide other incentives of equivalent financial value.

Fees and Exactions

Since the passage of Proposition 13 1978, it has been difficult to raise revenues through taxation. Several agencies now require the payment of fees or land dedication to offset the cost of providing planning services and public services for new development. Table V summarizes the City's planning, subdivision, and building permit fees and exactions as well as school impact fees. Development related fees can function as a constraint on residential development. The City through the Resource Management System, for

TABLE V

FEES

Application/Service/ Requirement	Fee/Dedication
School Impact Fee	
- residential	\$ 1.53/s.f. of habitable area
- commercial/industrial	.25/s.f.
Building Department valuation of \$53,900 (1)	
- building permit	\$ 295.00
- plan check	221.25
- plumbing permit	57.00
- mechanical permit	22.00
- grading permit	34.50
- sewer connection fee	1,575.00/per unit
- sewer delivery fee	1,212.00/per person
- water connection fee	3,269.00/per unit
- 2% public safety fee	1,078.00
Planning Department	
- Use Permit (non-profits: \$125)	\$ 375.00
- Use Permit Extension	125.00
- Use Permit Amendment	125.00
- Variance	187.50
- Exception	187.50
- Rezone	
(Suspended per Council action 6/21/88)	500.00
- Zoning Ordinance Amendment	500.00

Note:

(1) Assumes 1400 square foot, 3 bedroom/2 bath unit with no garage.

TABLE V (Cont.)

FEES

Application/Service/ Requirement	Fee/Dedication
- General Plan Amendment (Suspended per Council action 6/21/88)	750.00
- Planned Unit Development	375.00
- Lot Line Adjustment	62.50
- Parcel Merger	62.50
- Reversion to Acreage	125.00
- Parcel Map	250.00
- Tentative Final Map	125.00 + 12.50/lot
- Final Map	125.00 + 12.50/lot
- Parcel Map Waiver	125.00
- Amendment/Correction to Map	125.00
- Initial Study	125.00
- Environmental Impact Report	1,677.50
- Administrative Appeal	50.00
- Planning Commission Appeal	150.00
- Time-line Reconsideration	550.00
- RMS Waiver of Consideration	350.00
Subdivision Code	
Tentative Tract Map Filing Fee	\$ 25.00
City Engineer Services and Expenses	\$ 50.00
Checking Fee	\$ 1.00/lot 15.00 minimum

TABLE V (Cont.)

FEES

Application/Service/ Requirement	Fee/Dedication
Storm Drainage	The subdivider shall, subject to riparian rights, dedicate a r-o-w for storm drainage conforming substantially with the centerline or natural water course or channel, stream or creek that transverses the subdivision . . .
Park and Public Areas	<p>The Planning Commission may require adequate provision for suitable areas for parks, playgrounds, schools, and other public buildings.</p> <p>An offer of dedication shall be made to the City or other appropriate governing bodies of all parcels of land intended and/or designated to be used for public purposes.</p>

Source: City of Calistoga

example, has tried to lessen the impact of certain infrastructure fees on affordable housing units.

The General Plan Conservation Element and the Subdivision Code include policies and provisions towards the adequate provision of land for parks, schools, other public buildings, and drainage. No specific formulas for the calculation of required acreages is provided.

The most significant fee related to the production of affordable housing is the City's recent Inclusionary Housing Program adopted in June 1989. In response to the recognition that little or no new affordable housing has been built in the City, the City Council directed Planning Staff to prepare an Inclusionary Housing Program. All new residential projects of five or more units are required to address affordable housing in one of the following ways:

- 10% of the units for rent shall have rents affordable to very low and low income households (i.e. income levels that do not exceed 80% of the median income); 10% of ownership units shall be affordable to households with incomes below 120% of the County median income, or;
- A portion of the land of any new residential project shall be dedicated to the City for use as a site for affordable housing, or;
- An in-lieu fee, related to the cost of providing affordable housing, shall be offered to the City, or;
- Reasonable alternative methods - The City will entertain from housing developers offers of alternative measures to provide affordable housing in their projects.

The in-lieu housing fee is established at \$18,350 for each required affordable housing unit in any given project. The fee is the difference between the total construction cost to build the unit and the estimated affordable housing purchase price. Fees acquired through this program will be placed in a separate Housing Trust fund to be used exclusively for affordable housing development.

The program allows the developer to meet the affordable housing objectives in the community in many ways. Examples include:

- construction of affordable housing units in the project.
- construction of affordable housing units outside the project (i.e., developers could donate time, material and labor to construct units on other affordable housing sites).

- donation of units to the City (i.e. the Developer could donate a certain number of units to the housing authority who, in turn could either rent or sell the units to qualified families.
- provide in-lieu fees to the City.

This program in conjunction with other incentives to providing affordable housing will help increase the affordable housing stock in the City.

Recently, the Napa Valley Ecumenical Housing and Napa Valley Family Homes organizations have optioned a 4.54 acre site in Calistoga. Thirty-six to forty six units will be proposed (phone interview, Bob McCue, Director, Napa Valley Ecumenical Housing, September 4, 1990). No formal application has been submitted. The Inclusionary Housing Program as well as other programs in the General Plan Update Volume II: Policy and Program document could be used to help fund this and other affordable developments.

Processing and Permit Procedures

The various permits that a housing developer may be required to obtain are listed on Table V. The usual processing applications that are associated with residential development are listed below:

- | | |
|---------------------------|--------------------------|
| • General Plan Amendment | • Variance |
| • Specific Plan | • Zone Change |
| • Environmental Documents | • Parcel Merger |
| • Tract Maps | • Lot Line Adjustment |
| • Parcel Map | • Conditional Use Permit |

Most residential developments require only a few applications from the above list. Currently, a planning application moratorium is in effect (Ordinance 449) due to infrastructure constraints.

The moratorium on planning applications remains in effect until October 4, 1990. Exceptions to the prohibition include:

1. Those land use permits currently filed with the Planning Department.
2. Previously approved Tentative Subdivisions can be finalized.
3. Housing projects which offer at least fifty one percent of the units for affordable housing (HUD definition as applied to the City of Calistoga).

4. Public projects.

Should an extension of the Ordinance occur, market rate and some affordable housing projects may be delayed.

Programs intended to remove infrastructure constraints are contained in the Land Use and Circulation Elements of the Policy and Program Document, General Plan Update, Volume III.

Lengthy process times associated with permits, reviews, and hearings, may cause some developers (especially those with small projects) to avoid a city or county that has a reputation of long processing periods. Typical processing time in Calistoga is approximately three months for projects not requiring EIRs and three months and more for more complex projects requiring EIRs. These processing times are not excessive.

With regard to hearings, the Planning Commission is the body of approval for conditional use permits and tentative tract maps. Unless there is an appeal, the City Council will only review final tract maps. For a complex project three to four meetings may be required.

Policies Toward the Utilization of Federal and State Community Development Programs

In the current Housing Element, several Federal and State housing development programs are discussed. Programs which were to be pursued include:

- Urban Development Action Grant (UDAG) and Commercial Development Program
- HUD Sections 8, Lower Income Rental Assistance
- Small Cities Community Development Block Grant (State HCD)
- FmHA Rehabilitation Loans and Grants (FmHA 504)
- Homeownership Loans (FmHA 502) and Technical Assistance for Self-Help Housing (FmHA 523)
- Farmworker Housing Grant (State HCD)
- Deferred Payment Rehabilitation Loan Fund Program (State HCD-AB333)
- New Construction for the Elderly (HUD Section 202)

Of these programs, only four have been utilized: HUD Section 8, Community Block Grant, Rehabilitation Loans and Grants, and the Deferred Payment Rehabilitation Loan Fund Program (phone interview, Pat Rusch, November 30, 1989).

Currently, 26 households in Calistoga participate in the Section 8 program which is administered by the Napa Valley Housing Authority (phone interview, Marjorie Farr, November 30, 1989). Participation in the Community Development Block Grant Program has been described in the Housing Stock Condition section. Approximately 112 units have been rehabilitated with these funds. Participation in the Rehabilitation Loans and Grants has been low with only one resident applying. Approximately six Calistoga residents including three senior citizens participate in the Deferred Payment Rehabilitation Loan.

NonGovernmental Constraints

Non-governmental constraints to housing maintenance, improvement or development include the cost of land, the cost of construction, and the availability of financing. Studies of these components indicate that while construction costs as a portion of housing development costs have decreased over the long term, land development costs have increased. Over the long term, the percentage of cost accounted for by financing has increased, though this trend has fluctuated over the short-term as interest rates go up and down (Statewide Housing Plan, 1988). Each of these issues are described below.

Cost of Land

Currently within the City, a vacant property designated for residential uses is valued at \$55,000. This lot is slightly smaller than the usual 7,200 s.f. lots in the City's developed area. The lot's price may be slightly depressed due to infrastructure constraints (phone interview, Robert Beck, November 21, 1989). Half-acre lots towards the outside of the City have estimated values of approximately \$75,000 each. One-acre lots at the edge of the City limits have estimated values of approximately \$90,000. Land values have been provided by Beck and Taylor, Napa Valley Realty.

Cost of Construction

The cost of single-family home construction has risen from \$41.65 per square foot in 1980 to \$56.37 per square foot in 1988 (1989 National Construction Estimator). These costs include builders overhead and profit and a 450 s.f. garage (but no basement). The costs assume construction of a good quality home in a suburban area under competitive conditions. Since the above figures are national averages, they are not entirely representative of local conditions. Construction costs are higher in some localities than in others.

Area modifications have been developed to account for differences in local conditions. The Santa Rosa modification (1.17) provides the most applicable estimate for Calistoga. Total construction cost should be multiplied by this factor to obtain full building costs. For example, the total construction cost of a 1,500 square foot home would equal \$84,555. Multiplied by the area modification results in a full construction cost of approximately \$98,929.

Availability of Financing

The availability of financing is excellent (phone interview, Robert Beck, November 21, 1989). Many savings and loans as well as banks have branches located in the Cities of Napa and Santa Rosa. In a survey of 34 banks and savings and loans, interest rates ranged from 9.5% to 10.25% for a 30 year fixed rate mortgage. For an adjustable mortgage, initial rates ranged from 7.45% to 9.95% (Napa Valley Land Title Co. November 16, 1987).

Added to these rates often are the points that lenders charge for the loan as well as preparation fees. These are added on top of the interest rate and are usually paid up front. Point range from .75 to 2 for a 30 year loan term.

While the availability of financing is important, it is more essential to determine the effect of interest rates on housing affordability. Table W presents payment factors, annual payments, payments over mortgage terms, and income necessary to afford a home priced at \$155,000 to \$165,000 (as estimated earlier by St. Helena Realty). A household would have to earn \$44,500 annually in order to afford a home priced at \$155,000 with a 80% mortgage of \$124,000, and an interest rate of 9.5%. For higher interest rates, income needed rises.

The estimated annual incomes are substantially higher than most income estimates as presented in Table M. A family of four earning a moderate income may be able to afford current home prices. Very low and lower income households may be priced out of the housing market.

VACANT LAND SURVEY

Table X presents a 1989 estimate of vacant and underdeveloped land suitable for residential development. Regardless of designation all vacant and underdeveloped properties deemed suitable for residential development were assessed. General Plan and Zoning categories are consistent and have the same densities. Zoning categories are presented on Table X.

Results indicate that at full buildout 1,322 units could be provided. It is unlikely that all parcels will be developed with residential uses because of current and future land use

TABLE W
HOUSING AFFORDABILITY

	Term	Interest Rate		
		9.5%	10%	10.25%
Mortgage Payment Factor	15	.1277	.1315	.1334
	30	.1017	.1061	.1083
Annual Payment for \$124,000 Mortgage	15	\$15,840	\$16,303	\$16,536
	30	\$12,608	\$13,154	\$13,429
Annual Payment for \$132,000 Mortgage	15	\$16,862	\$17,355	\$17,603
	30	\$13,422	\$14,002	\$14,295
Payments over Mortgage Term \$124,000	15	\$237,603	\$244,541	\$248,041
	30	\$378,252	\$394,615	\$402,868
Payments over Mortgage Term, \$132,000	15	\$252,933	\$260,318	\$264,044
	30	\$402,655	\$420,074	\$428,859
Annual Household Income Necessary to Obtain \$124,000 Mortgage (Assumes 34% PITI/Gross Income Ratio)	15	\$55,907	\$57,539	\$58,363
	30	\$44,500	\$46,425	\$47,396
Annual Household Income Necessary to Obtain \$132,000 Mortgage (Assumes 34% PITI/Gross Income Ratio)	15	\$59,514	\$61,251	\$62,128
	30	\$47,371	\$49,420	\$50,454

Source: STA Planning, Inc.

TABLE X
VACANT AND UNDERDEVELOPED LAND INVENTORY SUITABLE
FOR RESIDENTIAL DEVELOPMENT

# of Parcels	# of Housing Units	Acreage (net)	% of Total	Zone
86	376	531	77.3	RR
116	400	81	11.8	R-1
36	130	9.6	1.4	R-2 & R-3
37	130	28	4	T
19	242	23.4	3	PD
21	44	5	.73	C & HC
Total 258	1,322	678	100.0	

Source: City of Calistoga

Assumptions:

1. Allowable densities:
RR - 1 unit per 40,000
LDR - 1 unit per 8,000
MDR - 1 unit per 3,333
T - 1 unit per 2,000
HDR - 1 unit per 2,000
2. Twenty percent of the total acreage was subtracted for street/park dedications for acreage parcels, except where noted below.
3. For parcels with a MDR or HDR land use designation and R-1 zoning, lot size was deemed to be 6,000 sq. ft.
4. In an in-fill neighborhood with R-3 or CC zoning, only vacant lots were counted or underutilized large parcels.
5. RR-RH and T were calculated at 50% of allowable density
6. Floodway lots were deleted.

policies and the availability of infrastructure. Housing development will most likely be restricted to a maximum of 54 units per year until 1995 due to water and sewer capacity constraints (Memo, Richard Spitler, Planning Director, to Planning Commission, November 24, 1988).

Overall, there is sufficient land available to provide housing well beyond the current and projected need. No additional annexations beyond the City's Sphere of Influence would be necessary.

As indicated on Table X, only 1.4% of vacant land is currently designated with higher residential densities (R-2 and R-3). Higher densities may also be allowed in the Planned Development District.

Some historic single-family areas are currently zoned with higher residential densities. These historic lower density neighborhoods contribute to the City's economy by attracting film-makers who use the homes in their film productions. Higher density developments disrupt the character of the neighborhood.

Due to desires for protection of historic residential areas, ~~it is likely that~~ higher density designations will change to ~~lower~~ medium density designations near Cedar Street according to the General Plan Update Volume II: Policy and Program Document. The Zoning Code will be updated to correspond with the General Plan Update Land Use Plan. Other areas of the City have been designated in the General Plan Update with higher densities than currently allowed in the 1977 General Plan and the current Zoning Code. According to the General Plan Update Volume III: EIR, Calistoga should be able to meet its housing objectives should active implementation of housing programs occur. This will further reduce the amount of land available for higher density housing.

In the last year, 1988-1989, nine single family homes in the R-1 zoning category were built. One four-plex structure was constructed on property zoned R-3. Typically, more units are built at lower densities. This trend will probably continue.

Since affordable units tend to be built at higher densities, most units would be built in the R-2 and R-3 zones. The amount of land currently available (with/adequate public services and facilities) in these zones would only allow for the development of 130 dwelling units. This would not meet the City's total regional share or the quantified objectives for low and moderate-income units. This assumes that the zones will remain as currently adopted.

If a 25 percent increase in density were approved for R-2 and R-3 designated lands, then there would be an increase in potential housing units as follows:

<u>Designation</u>	<u>Current Number of Potential Housing Units</u>	<u>Density Bonus Increase</u>
R-2 and	130	32

This would contribute to, but not result in the attainment housing objectives.

In order to maintain consistency with the General Plan, the Zoning Code will be revised. The densities and intensities will correspond with those listed on Table A of the Policy and Program document (General Plan Update: Volume II). Table B in the General Plan Update Volume III: EIR indicates that over the planning period of the General Plan (twenty years) a total of 1,678 housing units could be accommodated (this does not assume density bonus increases). Approximately half of these units will be built in the Medium Density Residential and High Density Residential categories.

Should active implementation of infrastructure and housing policies occur over the next five years as recommended in the Policy and Program document, the City would be able to meet and surpass its five-year housing objectives as determined by ABAG. The City would also be able to replace units recently demolished in the past few years.

ASSISTED RENTAL HOUSING AT RISK FOR CONVERSION

By January 1, 1992, all jurisdictions must incorporate discussions of assisted rental housing units at risk for conversion to non-low-income housing uses during the next ten years (SB 1282; Chapter 1451). Assisted housing developments include multi-family rental housing assisted under the following programs:

- Federal Section 8 (new construction, substantial rehabilitation, and loan management setasides)
- Federal Section 213
- Federal Section 221 (d)(3) Below-Market-Interest-Rate Program
- Federal Section 236
- Federal Section 202
- Federal Section 101 rent supplement assistance
- Federal Community Development Block Grant Program

- Federal (Farmers Home Administration) Section 515
- State and local multi-family revenue bond programs
- Local redevelopment programs
- Local in-lieu fee programs
- Units developed pursuant to local inclusionary housing programs
- Units developed to qualify for a local density bonus

Of the above programs, the City only utilizes local programs. Although the City identified Section 202 (New Construction for the Elderly) as a program in their Housing Element, the program has not been implemented. The Napa Valley Housing Authority reports that no subsidized housing complexes are located within the City of Calistoga (phone interview, Marjorie Farr, Napa Valley Housing Authority, December 8, 1989).

The Section 8 program in the City consists of Lower Income Rental Assistance which subsidizes lower income renters who may then live in market-rate units. The subsidy is with the renter and not with the unit itself. These units would not be in danger of conversion.

The City has received Small Cities Community Development Block Grant funds from the State Office of Housing and Community Development which administers the federal CDBG funds. Federal CDBG assistance funds must be addressed according to the recent legislation. The State Office of Housing and Community Development Department also anticipates legislative updates which would require additional analysis of State and locally-financed projects and projects assisted by the Federal Farmers Home Administration.

As described previously, under the State Small Cities CDBG program, property owners must agree to rent to low and moderate income households for the term of the rehabilitation loan which is usually 15 years. There are 72 rental units which have been rehabilitated under this program. The average loan period is 21 years. ~~There are 3 units with loan terms of 5 years which will expire before the end of the fiscal year. One other loan terms will expire in 1999 (phone interview, Pat Rusch, December 14, 1989).~~ Appendix C of the MEA contains a list of Assisted Rental Housing Units at risk for conversion to non-low income units. Two assisted rental units may have been potentially lost since their loan terms have recently expired. If feasible, the City should contact property owners to monitor rent levels to ascertain any decreases in affordability.

According to the City's Inclusionary Housing Program, the cost-estimate to produce a new modest single-family housing unit is \$137,000.00. The cost estimate to preserve ~~all units~~ the two CDBG units with loan terms expiring within the next ten years as affordable would be lower than replacement since the loan amounts are small and the loan terms are nearly expired. The amount required to preserve these units as affordable is analyzed in Appendix C.

Through its Inclusionary Housing Program, the City may be able to acquire or preserve ~~some units~~ the two units which may be converted ~~in~~ between 1990 and 2000. The City has identified a program to use CDBG repayment funds towards affordable housing. Another program includes the formulation of a Redevelopment Plan for the lower Washington area. In addition, there are a couple of non-profit affordable housing developers, including HAND located in the City of Napa and Ecumenical Housing in the City of St. Helena, who may be able to acquire and manage the qualifying housing developments.

No units have yet been developed under the City's density bonus provisions or under the recent Inclusionary Housing Program. Currently, the Inclusionary Housing Program includes resale controls. As units are developed, locations, numbers of units, and loan term expiration records should be maintained to monitor any conversions.

ENERGY CONSERVATION

Energy conservation can lower living expenses and maximize energy efficiency. Some older existing residences have poor thermal capacity. Table R indicates that 64 out of 210 respondents (31%) felt there were problems with insulation in their unit.

State and federal tax incentive programs and assistance programs offered by local power oriented companies provide several methods of energy conservation, including insulation, weatherization, and solar systems. Calistoga's Building Department complies with state building codes and other mandated legislation relating to energy conservation standards for new residential and non-residential buildings.

A non-profit corporation Housing Association for Napa Development (HAND) operates a county-wide Weatherization and Energy Conservation program out of the City of Napa. The program has been underutilized by Calistoga residents due to distance and language barriers in some cases. Those who utilize the program are required to attend an Energy Conservation Workshop sponsored by PG & E. The workshop is held only in English. This is not a strict requirement for those who do not speak or understand much English.

HAND also serves the County's senior citizens who qualify. In some cases, rails and wheelchair ramps will be installed. In addition, roofs and screen doors may be repaired (phone interview, Soledad Ramirez, November 30, 1989).

The City complies with state legislation for solar easements. Although Calistoga has no ordinances or building code requirements that formally touch on energy conservation, the City does reserve the right through the permit process to review design and orientation techniques that favor energy efficient site planning.

EQUAL HOUSING OPPORTUNITY

No formal discrimination complaints in Calistoga have been filed in the last several years. Phone inquiries, largely from Hispanic families, have occurred. Common complaints are that there are not enough units available for their family size. Investigations into complaints have shown that, there is a fear by land owners that there will be a larger number of people living there than originally rented to (phone interview, Maria Rodriguez-Welch, Napa County Rental Information and Mediation Department, December 11, 1989). Inquiries or reports of housing discrimination are normally referred to Napa County Rental Information and Mediation Department.

PUBLIC PARTICIPATION

In Fall of 1987, a resident's survey was conducted by students of California State Polytechnic University, San Luis Obispo in preparation for the General Plan Update. A random survey of Calistoga residents were asked what type of dwellings the residents would like to see. The greatest response was in favor of single family structures and low to moderate income housing. The housing types that residents would like to see less of include mobile homes, duplexes, and condominiums. Further public participation is planned with the circulation of all General Plan Update documents including the MEA.

HOUSING ELEMENT EVALUATION

Review of Goals, Objectives, Policies, and Programs

Review of the current Housing Element is important in assessing the effectiveness of goals, objectives, policies, and programs. This review partially provides a framework on which to develop new policies and programs. Table Y indicates the various policies and objectives and the status of implementation.

Regarding previous housing need projections from 1983 to 1987, the City's share was as follows:

very low income	47 units
lower income	18 units
moderate income	15 units
above moderate income	<u>20 units</u>
TOTAL	100 units

TABLE Y
HOUSING ELEMENT EVALUATION

Program	Objective (# of units)	Status
<u>Rehabilitation</u>		
CDBG	170	112 rehabilitationed
FmHA 504	24	1 application
AB333	yes	6 participants
Weatherization	42	Participation in HAND is low; not a large effort to educate citizens on energy conservation; participation in HAND is low due to distance and language barriers.
Special Circumstances Grant	37	Very few participants in Napa County in general (phone interview, Lynn Perez, County Welfare Department, December 6, 1989).
<u>Conservation</u>		
Section 8	30	26 participants
CDBG	85	See above under Rehabilitation
<u>Minimal New Construction</u>		
FmHA 502, 523 + Farmworker Housing Grant	15	No units constructed. Lack of financing, city-owned land, and available city staff.

TABLE Y (Cont.)
HOUSING ELEMENT EVALUATION

Program	Objective (# of units)	Status
HUD 202	40	No units constructed. Lack of financing, city-owned land, and available city staff.
Growth Management Plan and City Incentives	25	No units constructed. Lack of financing, city-owned land, and available city staff.
Conventional Market	20	209 (1) units
<u>Other</u>		
Redevelopment Agency Formation	N/A	In 1981, Calistoga's City Council adopted an ordinance establishing a Community Development Commission (CDC) with itself as the CDC Commissioner. Although several areas were analyzed as potential redevelopment districts, a plan was not formulated.
Adopt Historic Building Code	N/A	
Granny Flat/ Second Unit Law	N/A	adopted

TABLE Y (Cont.)
HOUSING ELEMENT EVALUATION

Program	Objective (# of units)	Status
Promotion of Equal Housing Opportunity	N/A	No formal complaints have been filed. Several inquiries have been made to the Napa County Rental Information and Mediation Department. Concerns include the lack of units available for larger families.
Sources:	City of Calistoga, Planning and Housing Departments 1983 Calistoga Housing Element	

Note: (1) Units constructed from July 1982 to April 1989

Though 25% of Calistoga's growth was to be set aside for low-moderate income housing, little or no new affordable housing has been built in the City (memo, Richard Spitler, Planning and Public Works Director, to City Council, June 2, 1989). In addition, pursuance of many Federal, and State programs and the institution of local programs has not occurred.

The following chart indicates how the Housing Element Update incorporates what was learned from the results of the 1985 Housing Element.

<u>Housing Impediments</u>	<u>Proposed Program</u>
<u>Participation in HAND is low due to distance and language barriers</u>	<u>EI1, FI3, FI4</u>
<u>Lack of financing, city-owned land, and available City staff.</u>	<u>AI3, AI5, AI7, AI9, AI10, AI11, AI12, AI13, BI2, BI3, BI4, BI5, BI6, BI9, CI1, CI3, BI4, DI5</u>
<u>Redevelopment plan not developed.</u>	<u>CI2</u>
<u>Historic Building Code not adopted.</u>	<u>Refer to Conservation and Safety Elements</u>

Programs are listed in Volume II: Policy and Program Document.

FINDINGS

1. Calistoga provides only a fraction of the County's housing, 7%.
2. Growth by decade in residential units increased by 6% in 1970 and 77% in 1980. Since 1980, growth was significantly slowed at 5.6%. Restrictions on water and sewer hook-ups continue to restrict housing growth.
3. Household size has generally decreased over the last 29 years to a present level of 2.13.
4. In 1980, 7% of the residents reported more than 1.01 person per room, the standard for determining overcrowded conditions.

5. A small percentage of residents (2.3%), have work disabilities or public transportation disabilities.
6. The elderly make up a major percentage of Calistoga's population. With increasing age many require convalescent care. The shortage of facilities forces some elderly to move to other localities.
7. 29% of 485 persons earning below the 1979 poverty level were aged 60 years and older.
8. Household size and family size has decreased in general for the Calistoga population. Household and family sizes are larger for Hispanic residents who tend to live in overcrowded conditions. There is a lack of larger rental units for larger families.
9. Many who work in the farming industries are farmworkers of Hispanic descent. The increase in the Hispanic population is result of increased opportunity in agricultural businesses and services. The majority live in low quality rental housing.
10. Of 93 families below the 1979 poverty level, 24% were female-headed households with children under 18 years of age.
11. No homeless persons have remained in the City for long periods of time, but tend to seek shelter for a few days. Each year 40 or more homeless persons, usually single males, have sought shelter especially at churches. If a shelter existed in Calistoga, it is estimated that it would be full every night. Through State legislation, the City is required to meet the needs of the homeless.
12. A significant amount of Calistoga's households overpay for housing costs. A majority of Calistoga's citizens are low income households.
13. Surveys indicate that housing unit condition is still a concern. Housing stock condition has been improved through the establishment of a Housing Rehabilitation Program. This program will continue through 1990 and will be significantly reduced thereafter.
14. Some problems with CDBG loan term requirements have been identified regarding retaining rental units for prior occupants.
15. Vacancy rates are low and units are sold or rented quickly. The market has been described as "tight."
16. There have been few demolitions in recent years.

17. Calistoga's regional share of housing is 28 units for existing needs and 310 units for projected needs through the year 1995.
18. Governmental constraints to the provision of affordable housing include RMS water to sewer infrastructure requirements. Some provision has been made for affordable housing fee reduction.
19. Specific density bonus provisions have been omitted from the proposed RMS amendment. Specified density bonus allowances are not included in City policy ordinances. Government Code Section 65915 et seq. require the institution of density bonuses or other incentives of equal financial value.
20. Of Federal and State programs identified in the 1983 Housing Element, only four programs have been utilized.
21. Interest rates affect the affordability of homes. At current interest rates, the necessary annual incomes exceed income estimates in most cases.
22. Infill residential land is available for growth and development.
23. There are limited amounts of land for multi-family development.
24. Some older residences have poor thermal capacity.
25. Participation in weatherization and energy conservation programs like HAND is low due to distance and sometimes language barriers.
26. No formal housing discrimination complaints have been filed with the Napa County Rental Information and Mediation Department. Phone inquiries have been received. Concerns include lack of units for larger families.
27. The City has not implemented several housing programs. In addition, objectives from the 1983 Housing Element have not been met.

APPENDIX C

ASSISTED RENTAL HOUSING AT
RISK FOR CONVERSION

Assisted Rental Housing at Risk for Conversion

1. Roy Lally
2215 Grant Street
Calistoga
\$17,500 loan
1 unit
\$79,000 Value
Exp. Date 3-91
Unknown square footage
Building date unknown
Tenant type unknown

2. Al Matinrazm
1603 Lake Street
\$15,800 loan
\$95,000 Value
750 Square feet
1 unit
Exp. Date 10-93
Building date unknown
Tenant type unknown

Assisted Rental Housing Units Potentially Lost

3. Sean Fitzgerald
1405 Lake Street
\$126,500 Value
1 unit
\$75,000 loan
1000 Square feet
Exp. Date 5-90
Building date unknown
Tenant type unknown

4. Al Matinrazm
1603 Lake Street
\$28,178 loan
\$95,000 Value
515 Square feet
Exp. Date 6-89
Building date unknown
Tenant type unknown

Cost to preserve units at risk for conversion:

1. \$17,500 loan
Exp. Date 3-91
Number of monthly payments remaining: 6
Estimated montly payment: \$338.00
Balance Due: \$2,028.00

2. \$15,800 loan
Exp. Date 10-93
Number of monthly payments remaining: 48
Estimated montly payment: \$305.00
Balance Due: \$14,640.00

Estimated cost of extending CDBG subsidy: No additional CDBG funds are anticipated. Should further rehabilitation work be required, costs of assuming loan repayment can be made at that time.

Estimated cost of maintaining rent levels: This cost can be estimated through the following formula, [Market rate rent - affordable rent level].

Affordable rents, based on income limits, are indicated on the table below.

AFFORDABLE RENTS

<u>INCOME GROUP</u>	<u>% OF MEDIAN INCOME</u>	<u>RENT</u>
<u>Under State Density Bonus Provisions</u>		
<u>Very Low</u>	<u>50%</u>	<u>\$485.00</u>
<u>Low</u>	<u>60%</u>	<u>\$582.00</u>
<u>HUD Categories</u>		
<u>Very Low</u>	<u>50%</u>	<u>\$485.00</u>
<u>Low Income</u>	<u>50%-80%</u>	<u>\$485.00-\$776.00</u>
<u>Moderate</u>	<u>80%-120%</u>	<u>\$776.00-1,164.00</u>

Source: STA Planning, Inc.

Note: Calculations are based on the following:
[% of medium income x medium income x .30] ÷ 12

HOUSING ELEMENT

INTRODUCTION

The Housing Element consists of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. The housing element identifies adequate sites for housing, including rental housing, factory-built housing, and mobilehomes, and shall make adequate provision of the existing and projected needs of all economic segments of the community.

Several major findings were made in the General Plan Master Environmental Assessment (MEA) and Issues & Options report including: affordable housing objectives as well as other objectives from the 1985 Housing Element have not been met; there is a lack of larger rental units for larger families; each year 40 or more homeless persons, usually single males, have sought shelter especially at churches; there have been difficulties in retaining rehabilitated rental units for prior low-income occupants; there are limited amounts of land for multi-family development; and due to chronic limitations on sewer and water services, population growth is limited to less than three percent per annum.

GOALS, POLICIES, AND IMPLEMENTATION PROGRAMS

GOAL A: *To provide a range of housing types for all economic segments of the community.*

POLICIES

1. Make every effort to provide affordable housing for those people who live and work in Calistoga, to meet all income levels, and to meet the City's fair share of housing as determined by ABAG.
2. Provide information to the public and developers on approved residential projects and vacant land supply.
3. Use local, state, and federal funding assistance, to the extent that these subsidies exist and are appropriate to Calistoga's needs, to assist the public and developers in the provision of affordable housing. This includes working with the Napa Valley Housing Authority.
4. Encourage the continued use of Section 8 rental assistance certificates by Calistoga residents.

5. Grant residential density bonuses for projects that reserve units for very low and/or low income households, as required by state law.
6. Continue to allow for the development of secondary residential units, as required by state law, while protecting the single-family character of neighborhoods.
7. Make an effort to preserve and increase the stock of rental housing, especially large rental units, for affordable to low and moderate income households.
8. Provide a jobs and housing relationship that satisfies local need for housing and affordability.
9. Work with the California Department of Housing and Community Development, the Napa Valley Housing Authority, County of Napa, and its municipalities in establishing and coordinating low income housing for special groups such as farmworkers, seniors, the disabled, and the homeless.
10. Promote the issuance of Mortgage Revenue Bonds and Mortgage Credit Certificates to assist first-time home-buyers.
11. Assure to the extent possible that visitor employee housing is available.

IMPLEMENTATION PROGRAM

The following programs need to be reviewed annually, as required by state law. Government Code 65400 provides for annual review of the General Plan. Responsibility and time frames for each of the programs are shown in Appendix A.

1. Through corporate and police powers, the City will make every effort to meet its fair share of housing as determined by ABAG. Please refer to Table C which contains housing objectives.
2. The City will regularly update the MEA and maintain a list of approved and proposed housing projects and make it available to the public.
3. The City will make use of governmental programs related to construction and rehabilitation needs of low and moderate income households. The City will apply for and/or make applications available to the public. Funding sources include, but are not limited to:

FEDERAL (FmHA)

- FmHA Section 502 - Rural Housing Home Improvement Loan Program. Provides loans to low income households to buy, build, improve, repair, or rehabilitate owner occupied rural homes.
- Section 504 - Rural Housing Repairs Program. Provides loans and grants to very low income persons to make repairs necessary for health and safety.
- Section 523 - Self-Help Housing. Provides grants and loans to fund technical assistance to groups building units financed under 502.
- Section 523/524 - Rural Housing Sites Loan Program. Provides direct loans to private or public non-profit organizations to acquire and develop land in rural areas.

STATE

- California Self Help Housing Program. Through grants and loans to local governments and non-profits, this program helps low and moderate income families construct or rehabilitate their homes.
- Predevelopment Loan Program. Low interest loans to local governments and non-profits for predevelopment activities.
- Nonprofit Housing Program. The California Housing Finance Agency (CHFA) provides permanent financing for contractor-built single-family homes developed by nonprofit organizations which serve lower income families.
- Minority and Small Business Development. CHFA assists minority-owned and women-owned developers.

LOCAL

- Inclusionary Housing Program. All new residential units - five or more are required to address affordable housing through providing 10% of the units as affordable to very low, low, and moderate income households, land dedication, in-lieu fee, or reasonable alternative method. Please refer to Table C which contains housing objectives.

- Make use of repayment funds from CDBG. Rehabilitation loans to facilitate retention, repair, and development of affordable housing units.
4. The City will ensure that all rental property owners allow the use of Section 8 rental assistance certificates.
 5. The City will amend the Zoning Code to grant residential density use bonuses for very low and/or low income in order to comply with Government Code Sections 65913.4, 65915, and 65917.
 6. The City will continue to implement the provisions of the Second Dwelling Units Chapter (17.37) of the City Zoning Code.
 7. The City will keep a list of all available and appropriate federal, state, and local funding sources that support rental housing units. The City will apply and/or provide applications to the following programs:

FEDERAL (FmHA)

- Section 515 - Rural Rental Housing Program. Provides loans to construct and rehabilitate rental and cooperative housing for low and moderate income families and elderly persons.

STATE

- Rental Housing Construction Program. Provides loans to local governments for the development of rental housing.
- The City shall apply for Proposition 77 and 84 funds for rehabilitation and construction of rental units.

LOCAL

- Inclusionary Housing Program. All new residential units - five or more are required to address affordable housing through providing 10% of the units as affordable to very low, low, and moderate income households, land dedication, in-lieu fee, or reasonable alternative method. Please refer to Table C which contains housing objectives.
8. The City will encourage mixed-use development through its Zoning Ordinance.

9. The City will establish a housing impact fee for new businesses to help house employees for low salaried positions.
10. The City will keep a list of all available state and regional programs that support housing for special need groups. The City shall apply and/or provide applications to the public. The City shall work with HCD and apply for the following programs:
 - Emergency Shelter Program - Award grants to local governments and non-profits for actively aiding the homeless.
 - Senior Citizens Shared Housing Program - Provides grants to local governments and non-profits helping seniors find others with whom they can share housing.
 - Office of Migrant Services - Awards grants to local governments for administration, management, operation, and rehabilitation of rental housing units for migrant families.
 - Farm Labor Housing Rehabilitation Loan Program. Provides loans to the owners of farm labor housing to bring it into compliance with the Employers Housing Act.
 - Housing Assistance Program - Provides Section 8 certificates to developmentally, mentally, and physically disabled adults. The Napa Valley Housing Authority distributes Section 8 rental certificates.
11. The City, alone or in conjunction with the County, will investigate California Debt Limit Allocation Committee requirements for issuance of tax-exempt Mortgage Revenue Bonds (MRBs). If feasible, the City and/or County will apply to the Committee for allocation of MRBs.
12. The City will provide information to developers and the public regarding the California Housing Finance Agency's (CHFA) bond financing program.
13. The City, alone or in conjunction with the County, will contact the California Debt Advisory Commission and investigate requirements to obtain authority for the issuance of Mortgage Credit Certificates (MCCs). The City and/or County will work with local and real estate agencies and lenders to implement a MCC program.
14. Rental housing for very low to low income households may be allowed to develop at densities as low as one unit per 1,000 square feet in High Density

Residential and Commercial Areas provided no health and safety problems would result.

15. Residential lots dedicated for ownership by low to moderate income households may have individual lot sizes as low as 5,000 square feet in Medium Density Residential and High Density Residential.

GOAL B: *To provide adequate sites for the development of all types of housing.*

POLICIES

1. Maintain an adequate supply of land in appropriate land use designations and zoning categories to accommodate projected household growth and to achieve residential vacancy rates allowing turnover with relative ease.
2. Update the Zoning Code to allow manufactured homes including mobilehomes in single-family zones as required by state law.
3. Update the Zoning Code to allow mobilehome parks on all land planned and zoned for residential uses, as required by state law.
4. Provide an adequate site or structure through the Zoning Code that allows the provision of emergency and transitional shelters, as required by state law. Currently the homeless need is related to emergency shelters.
5. Provide information to the public and developers on approved and proposed projects that include rental housing.
6. Encourage the development of convalescent care facilities.
7. In addition to providing density bonuses, the City will target specific incentives and funding sources at indicated adequate sites on Exhibit 9.
8. Provide for infill of Rural Residential designations to allow one-half acre lots provided water and sewer services are available.

IMPLEMENTATION PROGRAM

The following programs need to be reviewed annually, as required by State Law. Government Code 65400 provides for annual review of the General Plan. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will prepare a vacant land use map and inventory and regularly monitor vacant lands.
2. The City will rezone a significant amount of land designated for Transitional uses to residential uses. Through the Zoning Code, the City will allow limited residential units in commercial districts provided it can be done in a compatible manner.
3. The City will consider rezoning lands designated for commercial and industrial uses with mixed uses in order to accommodate projected housing needs.
4. In accordance with Section 65852.3 and 65852.4 of the Government Code, the City will revise its Zoning Code to allow manufactured homes in single-family zones.
5. In accordance with Sections 65852.7 of the Government Code, the City will amend its Zoning Code to allow mobilehome parks on all land planned and zoned for residential uses.
6. In accordance with Section 65583(c)(1) of the Government Code, the City will amend its Zoning Code to provide for the possibility of emergency and transitional shelters, should the need occur. Potential adequate sites are shown on Exhibit 9. Please refer to Table C for housing objectives.
7. The City will maintain a list that provides information on approved and proposed projects, especially projects which include rental housing. This list will be made available to the public.
8. The City will amend the Zoning Code to allow convalescent care facilities in additional land use categories.
9. The City will designate a housing coordinator to work with the Planning Department and/or with the City Administrator. Responsibilities of the housing coordinator shall include, but are not limited to, developing a pilot program to package housing incentives and funding sources aimed at developing affordable housing, farmworker housing, emergency shelters, and other types of housing. The coordinator shall also make recommendations for use of the City's CBDG repayment funds to the City Council.

10. The City will review its Capital Improvement Program annually to ensure that sewer/water/street improvements facilitate timely residential development.

GOAL C: *To encourage the maintenance and continued improvement of the existing housing stock and residential neighborhoods.*

POLICIES

1. Encourage private reinvestment in older residential neighborhoods and private rehabilitation of housing.
2. Use state and federal funding assistance to the fullest extent these subsidies exist to rehabilitate housing and shall continue to give housing rehabilitation efforts high priority in the use of remaining Community Development Block Grant funds and/or repayment funds.
3. Support the revitalization of older neighborhoods by keeping streets, sidewalks, and other municipal systems in good repair.
4. Promote the continued upkeep of existing mobilehome parks.
5. Require abatement of unsafe structures, giving property owners ample opportunities to correct deficiencies.
6. Reduce the amount of area zoned High Density Residential (HDR) in older neighborhoods consistent with the General Plan to reduce the pressure for removal of potentially historic single-family units to construct multi-family units.
7. Ensure that future CDBG loan agreements and other rehabilitation assistance agreements include clauses which require unit owners to retain the families that occupied the units prior to rehabilitation, unless adequate cause can be shown.
8. Promote the rehabilitation of seismically unsafe residential units.
9. Discourage the conversion of residential units to bed and breakfast establishments and other commercial uses.
10. Maintain the City's mobile home parks and protective zoning as a source of affordable residential housing.

IMPLEMENTATION PROGRAM

The following programs need to be reviewed annually, as required by State Law. Government Code 65400 provides for annual review of the General Plan. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will modify their fee structure to encourage private reinvestment of older residential neighborhoods and private rehabilitation of housing.
2. The City will review previous redevelopment studies and consider encouraging the formation of a special assessment district in the "lower Washington" area. Funds from the assessment could fund long-term rehabilitation and property upgrading programs for existing properties and structures.

- OR -

The City will reinitiate efforts to prepare and implement a redevelopment plan for the "lower Washington area" of Calistoga, if feasible. The plan will consider replacing older multi-family units with new multi-family units for very low to low income households.

3. The City will make use of governmental programs listed in implementing Program 3 under Goal A of the Housing Element. In addition, the City will apply for and/or provide applications for the following programs:

FEDERAL (FmHA)

- 533 - Rural Preservation Grant Program. Funds non-profit organizations to rehabilitate older rural homes for very low and low income families.

STATE

- Special User Housing Rehabilitation Program. Offers loans for rehabilitating residential, hotels, and other housing occupied by the elderly, disabled, and low income persons.
 - Deferred Payment Rehabilitation Loan Program. Provides loans to local governments to assist with the rehabilitation of housing for low and moderate income households.
4. The City will annually update its Capital Improvements Plan to ensure that municipal systems are in good repair.

5. The City will continue to enforce the provisions of the City Municipal Code and resolutions in order to maintain existing mobilehome parks.
6. The City will comply with the Unreinforced Masonry Law, Government Code 8875 et. seq. requiring local agencies to identify and mitigate unsafe structures as it would apply to housing structures.
7. The City will amend the Zoning Code to be consistent with the General Plan Land Use Plan (diagram).
8. The City will review all loan agreements for housing assistance to ensure clauses are included which require unit owners to retain the families that occupied the units prior to rehabilitation, unless adequate cause can be shown.
9. The City will amend their Zoning Code to regulate the placement of Bed and Breakfast establishments in residential neighborhoods. The amendment shall regulate minimum spacing and location next to local streets to prevent the proliferation of nonresidential uses in residential neighborhoods.
10. The City will enact an ordinance requiring loan recipients to give one-year advance notice to the City of potential conversions to market rate units.
11. Through its Inclusionary Housing Program, the City will assist non-profit housing corporations in purchasing subsidy termination units.
12. The City will consult with the Napa Valley Housing Authority to ascertain if there are available administration fee reserves.
13. The City will investigate the use of any future redevelopment funds and CDBG repayment funds towards replacing and/or preserving the City's assisted rental housing stock.

GOAL D: *To ensure the removal of governmental constraints to the development, maintenance, and improvement of housing.*

POLICIES

1. Update local ordinances according to state law including the Subdivision Ordinance, Zoning Code, and any others that may apply.

2. Allow using original materials and original methods as of date of construction in rehabilitation efforts, unless a health or safety hazard would occur, as consistent with state housing law.
3. Make every effort to facilitate permit processing related to residential improvement or development.
4. Promote the expeditious processing and approval of residential projects that meet General Plan policies and City regulatory requirements.
5. Ensure that the City's policies, regulations, and procedures do not add unnecessarily to the costs of producing housing while assuring the attainment of other City objectives.
6. Strive to resolve the sewer and water service problems to enable the moratorium to be lifted and residential projects to be developed in compliance with the Resource Management System.

IMPLEMENTATION PROGRAM

The following programs need to be reviewed annually, as required by State Law. Government Code 65400 provides for annual review of the General Plan. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will amend their Subdivision Ordinance and Zoning Ordinance to comply with the State Subdivision Map Act.
2. The City building inspector will inspect rehabilitation plans and allow the use of original materials and methods of construction unless a health or safety hazard would occur, as consistent with state housing law.
3. The City will implement a fast-track application procedure for projects that include residential development, especially projects that include affordable housing.
4. The City will ensure that housing projects within "affordable" guidelines have the first water and sewer offerings under a revised Resource Management System ordinance until the housing allocation objectives have been met.
5. The City ~~will continue to~~ may reduce, waive, or allow deferred payments of Resource Management System fees for second units, senior housing, and very low to low income housing projects.

6. If feasible, the City and applicant will participate in the Joint Venture for Affordable Housing, co-sponsored by the U.S. Department of Housing and Urban Development, the California Building Industry Association, and the California Department of Housing and Community Development to consider the reduction of development standards.

GOAL E: *To promote equal opportunity to secure safe, sanitary, and affordable housing for everyone in the community regardless of race, sex, and other arbitrary factors.*

POLICIES

1. Promote the enforcement activities of the State Fair Employment and Housing Commission.
2. Give special attention in housing programs to the needs of special groups, including the disabled, large families, the elderly, and families with lower incomes.
3. Refer any equal housing opportunity complaints to the Napa County Rental Information and Mediation Department.

IMPLEMENTATION PROGRAM

The following programs need to be reviewed annually, as required by State Law. Government Code 65400 provides for annual review of the General Plan. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will either provide, or support the Napa Valley Housing Authority in providing, educational services to the public and housing industry regarding their rights and responsibilities. Educational services shall include public service announcements in the local newspaper and the dissemination of brochures.
2. The City will refer any equal housing opportunity complaints to the Napa County Rental Information and Mediation Department (707) 253-2700.

GOAL F: *To encourage energy efficiency in all new and existing housing.*

POLICIES

1. Promote the use of energy conservation features in the design of all new residential structures.
2. Support the use of weatherization programs, such as HAND, for existing residential units.

IMPLEMENTATION PROGRAM

The following programs need to be reviewed annually, as required by State Law. Government Code 65400 provides for annual review of the General Plan. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will promote higher density and infill development.
2. The City will enforce existing state residential energy conservation standards.
3. The City will encourage efforts by HAND to promote energy conservation and provide information to the public on HAND programs.
4. The City will encourage HAND to provide local bilingual workshops, as needed to promote weatherization. Encouragements may include the provision of meeting space.

TABLE C
HOUSING OBJECTIVES¹

Goal	Program	Objective	Comments
A	1	Very Low Income Low Income Moderate Income Above Moderate	99 d.u.'s 56 d.u.'s 62 d.u.'s 93 d.u.'s Regional share determined by ABAG
A	3	10% of New Construction as Affordable	Local Program
A	7	10% of New Construction as Affordable	Local Program
B	6	1 Shelter	N/A
C	2 (policy)	13 d.u.'s Minimum	Remaining Units Qualifying Under CDBG
C	6	Abatement of All Unsafe Residential Structures	To be Identified
C	10	720 CDBG Subsidy Termination Units	Conserved as Affordable

Source: ABAG Regional Housing Needs Determination, January 1989
City of Calistoga Planning Department

Notes: ¹ The table summarizes housing needs and outlines Calistoga's quantified objectives for the period July 1, 1990 to July 1, 1995. These quantified objectives represent a reasonable expectation for the new housing units that will be developed and households that will be assisted between 1990 and 1995 based on the policies and programs outlined in this section and general market conditions.

Memorandum

To : Dr. Gordon F. Snow
Assistant Secretary for Resources

Date : September 7, 1990

Ms. Jo Noble
City of Calistoga
1232 Washington Street
Calistoga, CA 94515

Subject: Draft Environmental
Impact Report for
Calistoga General
Plan Update,
SCH# 90030423

From : Department of Conservation—Office of the Director

The Department of Conservation's Division of Mines and Geology (DMG) has reviewed the Draft Environmental Impact Report (EIR) for the City of Calistoga's General Plan Update. This Draft EIR analyzes the environmental impacts of the proposed update of the General Plan originally adopted on March 15, 1977. The study area of the General Plan is approximately 3.43 square miles, or 2,200 acres, of which 2.5 square miles, or 1,600 acres, are within the limits of the City of Calistoga. Specific development plans are not addressed in this EIR and will be analyzed as specific projects are proposed. The following reports were reviewed by DMG:

- o City of Calistoga, General Plan Update, Draft Master Environmental Assessment and Issues & Options, Volume I, prepared by STA Planning, Inc., December 1989.
- o City of Calistoga, General Plan Update, Policy and Program Document, Volume II, July 7, 1990.
- o Addendum to the Calistoga General Plan Update, Planning Commission Recommendations, Volume II, August 1, 1990.
- o General Plan Update, Draft Environmental Impact Report, City of Calistoga, Volume III of the General Plan, prepared by STA Planning, Inc. July 27, 1990, SCH# 90030423.

Based on our review of these documents, we offer the following comments:

1. The technical discussion of geologic and seismic hazards of the City of Calistoga is limited. This is partly due to a lack of specific geologic hazards studies in the Calistoga area. However, there are several existing regional studies that can assist the City in assessing the areas and level of geologic hazards. Potential areas of landslide hazards have been identified for the area around Calistoga by the U.S. Geological Survey (Nilsen and Wright, 1979; Wright and Reid, 1975). Seismic hazards of the Calistoga area have been recently evaluated by DMG (Hart, 1983) and by Wong (1990). Studies of the geothermal resources of Calistoga, including collection and interpretation of subsurface geologic data, have been undertaken by the State of California (Youngs and

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September 7, 1990
Page Two

others, 1980; Taylor and others, 1981; Cal. Energy Comm., 1986). These technical documents may be of benefit to the City of Calistoga. We recommend that the City's Planning Director consider incorporating relevant data from these and other technical reports into the Safety Element.

2. The active faults that may affect the City of Calistoga are shown in Exhibit 22 of Volume 1 of the General Plan Update. This map does not label the Maacama fault located approximately 4 miles west of the City. The Maacama fault has been classified as active and is zoned under the Alquist-Priolo Special Studies Zone Act of 1972 (see the Mark West 7-1/2 min. A-P quadrangle map, issued July 1, 1983). This fault has a maximum credible earthquake of magnitude 7-1/2 (Wesnousky, 1986) and may present as great a hazard to the City of Calistoga as the West Napa fault. Peak ground accelerations from a maximum credible earthquake on the Maacama fault may exceed the 0.4g acceleration anticipated in the seismic design methods of the 1988 Uniform Building Code.

Therefore, we recommend that the City include, in the Safety Element, a table of the active and potentially active faults that may affect the City. This table should list the maximum credible and maximum probable earthquakes for each fault, the expected level of peak ground acceleration, and the duration of strong shaking. DMG Note 43, "Recommended Guidelines for Determining the Maximum Credible and the Maximum Probable Earthquakes", is enclosed. This document may aid in the determination of earthquake magnitude potential for nearby active faults.

If you have any questions regarding these comments, please contact Roger Martin, Division of Mines and Geology Environmental Review Project Manager, at (916) 322-2562.

Dennis J. O'Bryant
Environmental Program Coordinator

DJO:KC:skk

Enclosure

cc: Roger Martin, Division of Mines and Geology
Kit Custis, Division of Mines and Geology

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September 7, 1990
Page Three

References:

California Energy Commission, October 1986, Staff Report of Calistoga Geothermal Resource Assessment, Final, technical document P 500-86-017, 76 pp.

Hart, E.W., and others, 1983, Summary Report: Fault Evaluation Program, 1981-1982 Area-Northern Coast Ranges Region, California, DMG Open-File Report 83-10, 17 pp.

Nilsen, T.H., and Wright, R.H., and others, 1979, Relative Slope Stability and Land-use Planning in the San Francisco Bay Region, California, U.S.G.S. Professional Paper 944, 96 pp.

Taylor, G.C., and others, 1981, Addendum to Resource Assessment of Low- and Moderate-Temperature Geothermal Waters in Calistoga, Napa County, California, DMG Open-File Report 81-13A.

Wesnousky, S.G., 1986, Earthquakes, Quaternary Faults, and Seismic Hazard in California, Journal of Geophysical Research, vol. 91, no. B12, pgs. 12,587-12,631.

Wright, R.H., and Reid, G.O., 1975, Photointerpretive Map of Landslides and Surficial Deposits of Northernmost Napa County, California, U.S. Geological Survey Misc. Field Studies Map MF-677, scale 1:24,000.

Wong, I.G., 1990, Seismotectonics of the Coast Ranges in the Vicinity of Lake Berryessa, Northern California, Bulletin of Seismological Society of America, vol. 80, no. 4, pps. 935-950.

Youngs, L.G., and others, 1980, Resource Assessment of Low- and Moderate-Temperature Geothermal Waters in Calistoga, Napa County, California, CMG Open-File Report, 81-13.



RECOMMENDED GUIDELINES FOR DETERMINING THE MAXIMUM CREDIBLE AND THE MAXIMUM PROBABLE EARTHQUAKES

The following guidelines were suggested by the Geotechnical Subcommittee of the State Building Safety Board on 3 February 1975 to assist those involved in the preparation of geologic/seismic reports as required by regulations of the California Administrative Code, Title 17, Chapter 8, Safety of Construction of Hospitals. CDMG is currently using these guidelines when reviewing geologic/seismic reports.

Maximum credible earthquake

The maximum credible earthquake is the maximum earthquake that appears capable of occurring under the presently known tectonic framework. It is a rational and believable event that is in accord with all known geologic and seismologic facts. In determining the maximum credible earthquake, little regard is given to its probability of occurrence, except that its likelihood of occurring is great enough to be of concern. It is conceivable that the maximum credible earthquake might be approached more frequently in one geologic environment than in another.

The following should be considered when deriving the maximum credible earthquake:

- (a) The seismic history of the vicinity and the geologic province;
- (b) the length of the significant fault or faults which can affect the site within a radius of 100 kilometers; (See CDMG Preliminary Report 13);

- (c) the type(s) of faults involved;
- (d) the tectonic and/or structural history;
- (e) the tectonic and/or structural pattern or regional setting (geologic framework);
- (f) the time factor shall not be a parameter.

Maximum probable earthquake (functional-basis earthquake)

The maximum probable earthquake is the maximum earthquake that is likely to occur during a 100-year interval. It is to be regarded as a probable occurrence, not as an assured event that will occur at a specific time.

The following should be considered when deriving the "functional-basis earthquake":

- (a) The regional seismicity, considering the known past seismic activity;
- (b) the fault or faults within a 100 kilometer radius that may be active within the next 100 years;
- (c) the types of faults considered;
- (d) the seismic recurrence factor for the area and faults (when known) within the 100 kilometer radius;
- (e) the mathematic probability or statistical analysis of seismic activity associated with the faults within the 100 kilometer radius (the recurrence information should be plotted graphically);
- (f) the postulated magnitude shall not be lower than the maximum that has occurred within historic time.

PYA, JES, RWS 2/75

CITY OF CALISTOGA

In Beautiful




Napa Valley

1232 WASHINGTON STREET • CALISTOGA, CALIFORNIA 94515 • (707) 942-5188

MEMORANDUM

DATE: November 7, 1990

TO: Mr. Dennis J. O'Bryant
Environmental Program Coordinator
State of California
Department of Conservation

FROM: Richard Spitler 
Acting Planning Director
City of Calistoga

We have included your letter of September 7, 1990 in the Final EIR for the General Plan Update. Responses to your comments are provided in that document. In this memo, we would like to highlight the additions made to the General Plan Update Volume I: the Master Environmental Assessment (MEA). These additions are noted in the attached Health and Safety section. In addition, a clean copy of the MEA and Policy and Program Document, as adopted, are enclosed.

1. We have incorporated information on seismic and slope stability hazards from several suggested references. Table TT includes the categories of slope stability found in the Calistoga area.

Though the Department suggested references regarding the City's geothermal resources, this subject is covered in the Minerals section of the MEA. We have used the California Energy Commission's 1986 report as a basis for the discussion.

2. Exhibit 22 has been revised to indicate the Maacama fault. Table QQ now includes information on the active and potentially active faults that could affect the City.

Should you have any further questions please contact me at (707) 963-1345 or Lisa Grueter at STA Planning, Inc., (415) 296-7760. Thank you.

HEALTH AND SAFETY

INTRODUCTION

The City of Calistoga is located in an area subject to natural hazards. This section provides a data and information related to fire hazards, seismic hazards, hydrology/flooding, and hazardous waste.

FIRE HAZARDS

Napa County like elsewhere in the State of California has a wildland fire potential. The combination of highly flammable vegetation, long and dry summers, rugged topography, and people who live, work and recreate in the wildlands adds up to a situation that results in wildland fire risk and hazards (Napa County General Plan, 1983).

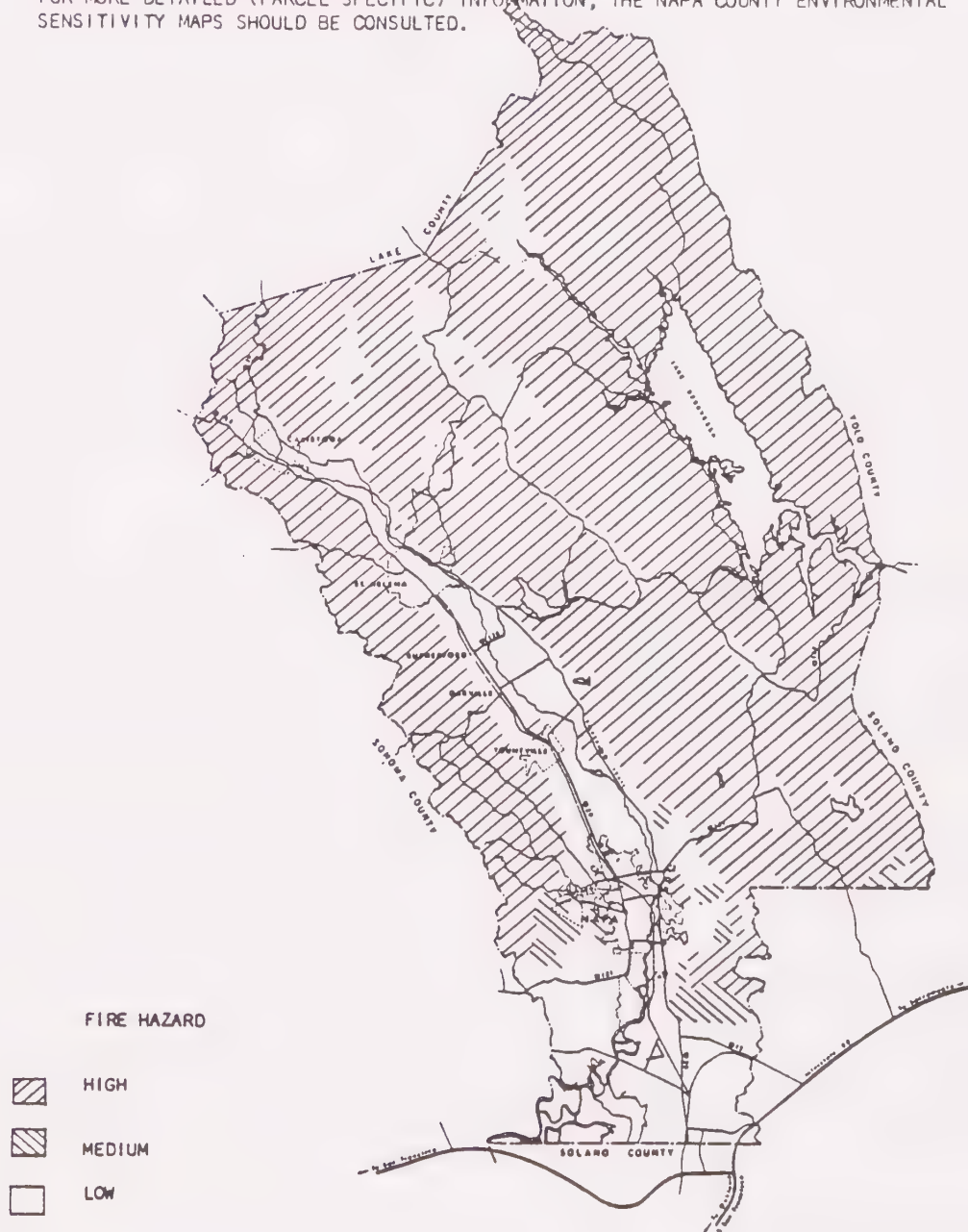
The California Department of Forestry (CDF) has developed a Fire Hazard Severity Scale which utilizes three criteria in order to evaluate and designate potential fire hazard areas in wildland areas. The criteria are fuel loading (vegetation), fire weather (winds, temperatures, humidities, and fuel moisture contents) and topography (degree of slope). Vegetation clearance standards are enforced by the Department of Forestry (Napa County General Plan 1983).

With its Mediterranean Climate, Napa County experiences a long, dry summer from May to November during which winds, temperatures, humidities, and fuel moisture contents maintain high hazard levels. Of these four factors, wind is the most critical factor. Steep slopes in Napa County contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult (Napa County General Plan, 1983).

Criteria in the Fire Hazard Severity Scale has been used by the CDF to map areas of fire hazard in Napa County. The map appears on Exhibit 19. In general, the City of Calistoga is classified as an area of low fire hazard risk with the exception of the western portion of the City which is situated on steeper slopes and has more vegetation.

According to Mark Thomas, City Fire Chief, there have been no problems with wildland fires in the last four years. In 1982 there was a large wildland fire in the Mt. St. Helena area. During the period of December 1985 to January 1986 there were two relatively small fires in the area. One fire was ignited by fallen power lines and burned 50 acres. Another fire burned 150 acres and was caused by lightning strike (phone interview, Chief Thomas, October 6, 1989).

THIS MAP IS INTENDED TO PROVIDE A GENERALIZED PICTURE OF WILDLAND FIRE HAZARDS; FOR MORE DETAILED (PARCEL SPECIFIC) INFORMATION, THE NAPA COUNTY ENVIRONMENTAL SENSITIVITY MAPS SHOULD BE CONSULTED.



Source: Napa County General Plan



FIRE HAZARDS **MASTER** **ENVIRONMENTAL ASSESSMENT** **City of Calistoga**

STA inc.
no scale



Exhibit 19

SEISMIC HAZARDS

Earthquakes give rise to various seismic hazards including surface faulting, ground shaking, associated ground failure, generation of large waves in bodies of water, and regional subsidence or downwarping. Seismic hazards can cause damage to structures and risk the health and safety of citizens. Seismic hazards vary widely from area to area, and the level of hazard depends on both geologic conditions and the extent and type of land use (U.S. Geological Survey 1974).

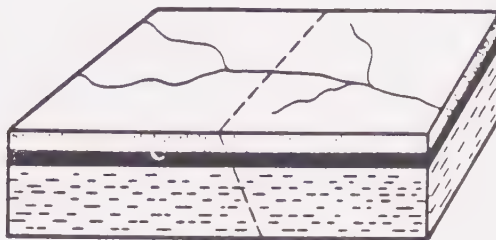
Regional and local geology has been largely abstracted from several documents including Seismic Hazards and Land-Use Planning published by the U.S. Geological Survey in 1974 and a recent environmental assessment prepared by Geo/Resource Consultants for the proposed Police Department Facility submitted to the City in July 1989. In addition, the Seismic Safety Element of the Napa County General Plan is also referenced as it contains information on Calistoga and the study area. The County Safety Element is based on a regularly updated background report.

Surface Faulting

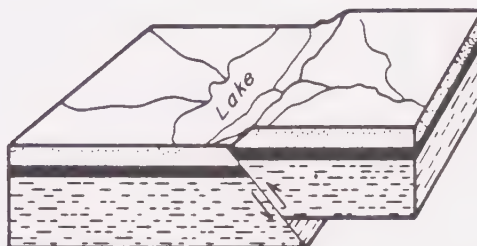
Faults are areas of failure along surfaces in earth materials where the materials on opposite sides of the failure have moved relative to one another in response to the accumulation of stress. Exhibit 20 shows the different types of faults. Any fault movement beneath a building in excess of an inch or two could have catastrophic effects on structures depending on design and construction and the shaking stresses the structure undergoes at the same time (U.S. Geological Survey 1974).

The San Francisco Bay Region contains a number of major active faults. An active fault is defined by the State Mine and Geology Board as one which has "had surface displacement within Holocene time (about the last 11,000 years)" (Geo/Resource Consultants July 1989). The three most prominent faults in the region are the San Andreas, Hayward and Calaveras Faults. Major faults in California and significant earthquakes are presented on Exhibit 21. Potential seismic hazards associated with the three faults include strong ground motion and surface rupture along active fault traces. Secondary effects could include seismically induced ground failure such as liquefaction, rapid ground settlement or lateral spreading (Geo/Resource Consultants, July 1989).

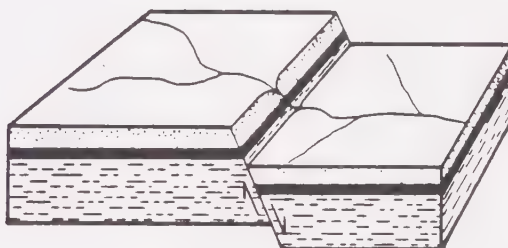
During the last 200 years, several major earthquakes of Richter Magnitude 7.0 or greater have occurred in the San Francisco region, resulting in loss of life and large amounts of structural damage. The most recent event took place October 17, 1989, when a 7.1 magnitude earthquake struck the Bay Area. The epicenter was located north of the City of Santa Cruz. Calistoga experienced a light shock which only lasted a few seconds. No appreciable damage occurred.



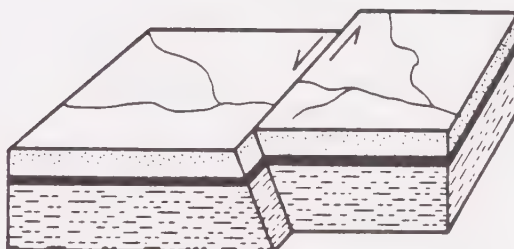
Earth block before movement



1a. Thrust or reverse fault



1b. Normal fault



1c. Left-lateral fault



1d. Monoclinal fold caused by faulting at depth

Source: Geological Survey Circular 690

TYPES OF FAULTS

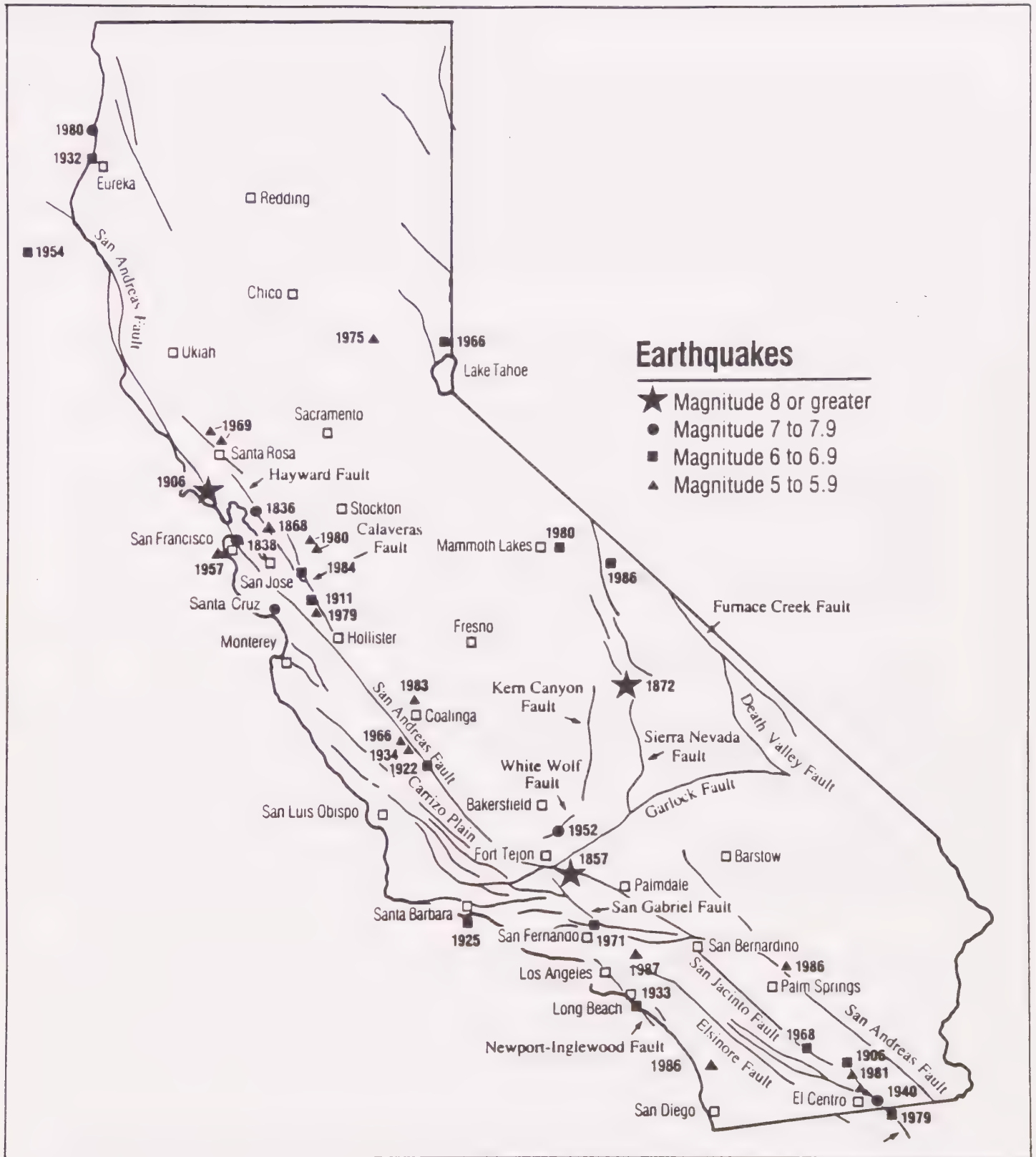
MASTER
ENVIRONMENTAL ASSESSMENT
City of Calistoga

STA inc.

no scale



Exhibit 20



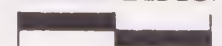
Source: Napa County General Plan



MAJOR FAULTS & EARTHQUAKES, CALIF.

MASTER
ENVIRONMENTAL ASSESSMENT
City of Calistoga

STA inc.



no scale

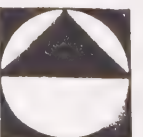


Exhibit 21

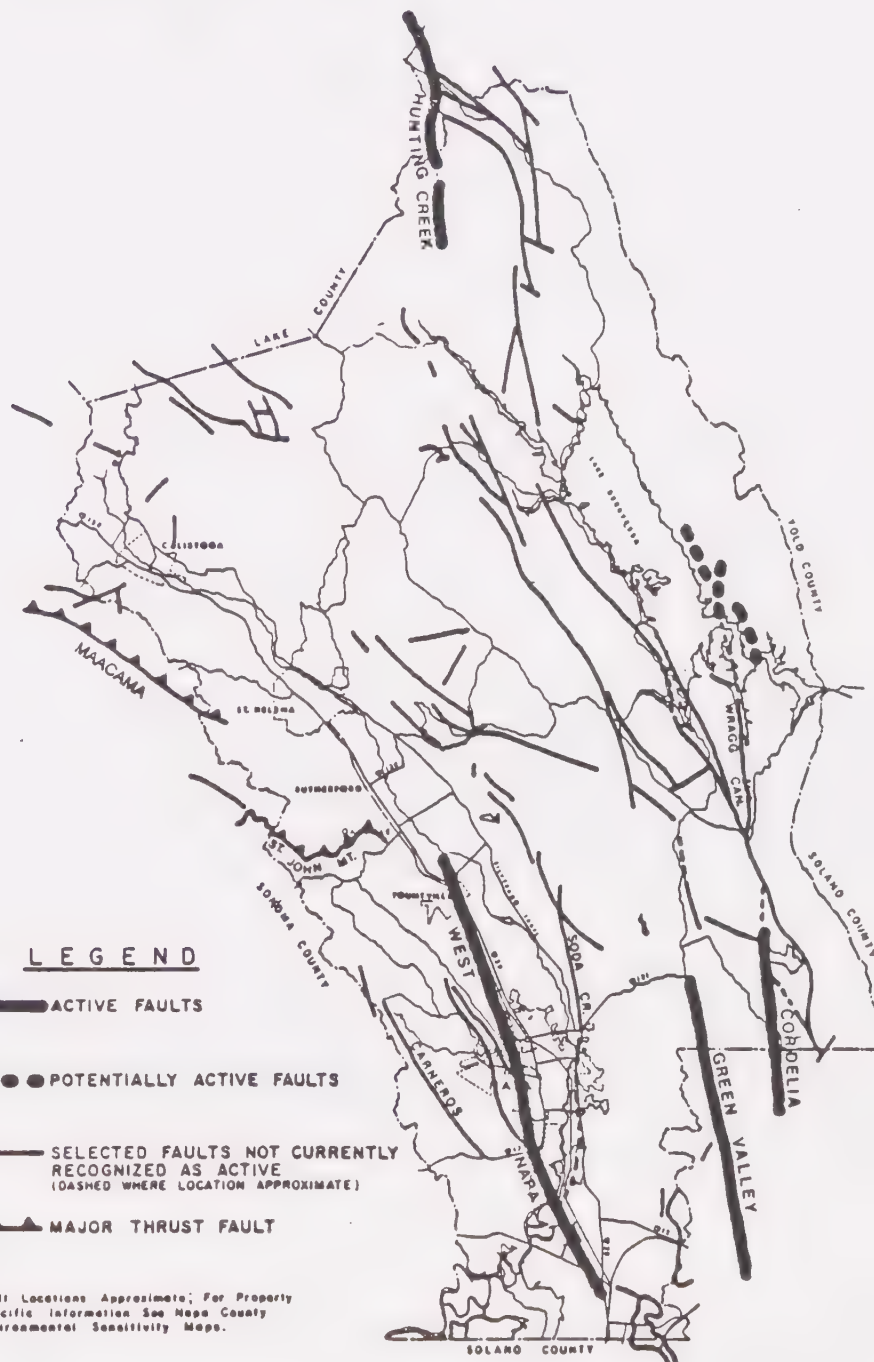
The Richter Scale is a logarithmic scale developed by Charles Richter to measure earthquake magnitude by the energy released, as opposed to earthquake intensity (Geo/Resource Consultants, July 1989). The largest recorded earthquakes were in 1836 and 1868 (each 6.8 in magnitude) on the Hayward fault and in 1906 (7.7 in magnitude) on the San Andreas fault. The heaviest damage resulted from liquefaction and rapid settlement in areas underlain by soft bay mud and fill material. In Santa Rosa, heavy damage resulted from intense ground shaking amplified by the presence of loose fill in old stream channels and by the saturation of alluvium at shallow depths (Geo/Resource Consultants July 1989).

Active faults in the County of Napa include the Cordelia, Green Valley and West Napa Faults. The Hunting Creek Fault is a fourth active fault that may be northward extension of the Green Valley Fault. Faults in Napa County roughly parallel the northwest-southeast course of the San Andreas Fault (Napa County General Plan 1983).

The closest active fault in Napa County to the City is the West Napa Fault. The north terminus of this fault is approximately 15 miles south of Calistoga. Based on fault length, the three main active faults in Napa County are capable of producing earthquakes with a Richter Magnitude of up to 6.75. Such an earthquake, which is considered a moderate-sized event, would be capable of producing a substantial amount of damage, even to wood framed structures (Geo/Resource Consultants, July 1989). Exhibit 22 shows active and inactive faults within the County limits.

Active faults relatively close to the City include the Maacama and Rogers Creek-Healdsburg faults in Sonoma County. In October 1969 two moderate earthquakes of magnitudes 5.6 and 5.7 occurred on the Healdsburg-Rogers Creek fault, on the north side of Santa Rosa, approximately 20 miles south west of the study area. These earthquakes caused unexpected damage to earthquake-resistant buildings and deformation of the underlying alluvium in the form of lurching or collapse of unconsolidated fill. Earthquake effects were confined within a 2 mile long zone along the fault trace (Geo/Resource Consultants, July 1989). A 6.2 magnitude earthquake occurred on the Rodgers Creek fault in 1898 (Wesnousky 1986)

A thrust fault has been noted approximately four miles southwest of the City. This fault may be a southern extension of the Maacama fault. Strong geomorphic evidence of Quaternary (within the last two million years) surface movement on the Maacama fault includes offset exposed in a road cut on Highway 128 and approximately 1.25 miles southeast of Big Sulphur Creek. Evidence suggests that an earthquake of magnitude 5.9 has occurred in the area of the thrust fault extension between 1969 and 1973. Potentially damaging groundshaking resulting from earthquake activity will occur somewhere in Sonoma County every 20 to 30 years. This conclusion is relevant to the Calistoga Study Area due to its proximity (approximately 5 miles) to Sonoma County (Geo/Resource Consultants, July 1989).



FEB. 15, 1983

Source: Napa County General Plan

FAULTS WITHIN NAPA COUNTY MASTER ENVIRONMENTAL ASSESSMENT City of Calistoga

STA inc.
no scale



Exhibit 22

Studies suggest that "[t]he likely transfer of slip northward from the Hayward to the Healdsburg, Rodgers Creek, and Maacama fault zones implies a zone of high seismic hazard extending north of San Francisco Bay as well (Wesnousky 1986). Recent research has been conducted in the Napa Valley area (Wong 1990). Results show the following:

Contemporary seismicity north of the San Francisco Bay region in northern California has been concentrated along two major fault zones east of the seismically quiescent San Andreas fault: the Rodgers Creek - Maacama and the Green Valley - Bartlett Springs faults (Cockerham, 1986; Eberhart-Phillips, 1988). Furlong et al. (1989) suggest that these zones represent young faulting possibly related to a newly developing plate boundary.

...Based on a contrast in deformation, Fox (1983) has defined two structural blocks in the region north of San Francisco Bay: the Sebastopol block on the west and the relatively intensely deformed (folded) Santa Rosa block to the east. The latter is cut by eight major north-northwest-trending right-lateral, strike-slip faults or fault systems including the Tolay, Rodgers Creek, Healdsburg, Maacama, Bennett Valley, Carneros, West Napa and Green Valley faults....

The eastern boundary of the Coast Ranges and the Santa Rosa block (?) coincides with a postulated 600 km-long zone of complex thrust/reverse faulting which forms the boundary between the Coast Ranges and the western portion of the Sierran block (the Great Valley) (Wong and Ely, 1983; Wong et al. 1988; Wentworth and Zoback, 1989). Significant crustal deformation has and is occurring along the San Andreas fault and to a lesser degree, along the CRSB boundary zone and on numerous faults in between.

Information on maximum credible earthquakes affecting the City of Calistoga is presented on Table QQ. Maximum probable earthquakes are normally estimated at .25 to .5 less in magnitude than a maximum credible earthquake. Historic earthquakes are also a good indicator of maximum probable earthquakes.(phone interview, Kit Custis, Division of Mines and Geology, September 10, 1990) Historic earthquakes are discussed on the previous pages.

Ground Shaking

Earthquake ground shaking in many instances causes the most widespread earthquake damage. The intensity of groundshaking can be several times larger on sites underlain by thick deposits of saturated sediments than on bedrock. The amplification effects of local geologic deposits, the amount of ground shaking at a particular site, depends on (1) characteristics of the earthquake source (magnitude, location, and area of causative fault surface) and (2) distance from the fault.

TABLE QQ
ACTIVE AND POTENTIALLY ACTIVE FAULTS

<u>Fault</u>	<u>Length (km)</u>	<u>Distance¹</u>	<u>Moment Magnitude</u>	<u>Horizontal Acceler- ation (g)²</u>	<u>Rupture Repeat Time (Yrs)</u>
<u>Cordelia</u>	<u>22</u>	<u>40</u>	<u>6.7</u>	<u>.08</u>	<u>> 10,000 yrs</u>
<u>Green Valley</u>	<u>35</u>	<u>40</u>	<u>6.9</u>	<u>.09</u>	<u>424</u>
<u>Hayward (C)</u>	<u>51</u>	<u>73</u>	<u>7.1</u>	<u>.04</u>	<u>556</u>
<u>Healdsburg</u>	<u>32</u>	<u>21</u>	<u>7.0</u>	<u>.20</u>	<u>228</u>
<u>Maacama</u>	<u>151</u>	<u>6</u>	<u>7.6</u>	<u>.70</u>	<u>696</u>
<u>Rodgers Creek</u>	<u>38</u>	<u>26</u>	<u>6.9</u>	<u>.30</u>	<u>255</u>
<u>San Andreas (Shelter Cove to San Juan Bautista)</u>	<u>420</u>	<u>62</u>	<u>7.8</u>	<u>.20+</u>	<u>300</u>
<u>West Napa</u>	<u>17</u>	<u>24</u>	<u>6.5</u>	<u>.30</u>	<u>> 10,000</u>

Source: Wesnousky 1986
U.S.G.S. Professional Paper 1360

¹Estimated distance in kilometers from the City to the fault.

²g" stands for acceleration of gravity.

The energy that is released as the earth's crust moves at the earthquake focus is transmitted as elastic waves up through the bedrock to become a series of complex waves or oscillations in surficial materials. Most soils (surficial material) and rocks have elastic properties up to certain levels of stress. If the stress load of an earthquake is too great, the soils and rocks will deform (Napa County General Plan 1983).

A subjective measure of the force of an earthquake at a particular place as determined by its effects on persons, structures, and earth materials. The principal scale used is the Modified Mercalli Scale is a measure of earthquake intensity. Lower numbers on the scale indicate less severe shaking and are based on what people feel; intermediate numbers are assigned according to the type and amount of building damage sustained, and higher numbers principally to secondary geologic effects (U.S. Geological Survey 1974). Table RR summarizes the Modified Mercalli Scale in relation to the Richter Scale.

The County of Napa General Plan has compiled a list of felt reports in the County during the period of 1864 to 1969. Table SS lists the reports associated with the City of Calistoga. In all, eighteen reports are noted on the table.

Ground Failure/Soil Stability

Earth materials in a natural conditions tend to reach equilibrium over a long period of time. In geologically young and active areas such as California, there are many regions where earth materials have not yet reached a natural state of stability. Many valleys and bay margins are underlain by recent loose materials that have not been compacted and hardened by long-term natural processes (U.S. Geological Survey 1974).

Landslides are common on most of the hills and mountains as loose material moves downslope. In addition, many activities of man tend to make the earth materials less stable and increase the chance of ground failure. Some of the natural causes of instability are earthquakes, weak materials, stream and coastal erosion, and heavy rainfall. Human activities that contribute to instability include oversteepening of slopes by undercutting them or overloading hem with artificial fill, extensive irrigation, poor drainage or even ground-water withdrawal, and removal of stabilizing vegetation. These causes of failure, which normally produce landslides and differential settlement, are augmented during earthquakes by strong ground motions that result in rapid changes in the state of earth materials (U.S. Geological Survey 1974). It is these changes by means of liquefaction and loss of strength in fine-grained materials, that result in many landslides during earthquakes as well as differential settlement, subsidence, ground cracking, ground lurching and other changes in the ground surface.

TABLE RR

MODIFIED MERCALLI SCALE IN RELATION TO RICHTER SCALE

Richter Magnitude	Expected Modified Mercalli Maximum Intensity at Epicenter	
2	I - II	Usually detected only by instruments
3	III	Felt indoors
4	IV - V	Felt by most people; slight damage
5	VI - VII	Felt by all; many frightened and run outdoors; damage minor to moderate
6	VII - VIII	Everybody runs outdoors; damage moderate to major
7	IX - X	Major damage
8 +	X - XII	Total and Major Damages

Source: Napa County General Plan, 1983

TABLE SS

FELT REPORTS IN CALISTOGA 1864 - 1989

Year	Date	Time	Description
1868	May 9	23:30	
1871	June 21		Severe
	October 21		
1885	Feb 5	23:00	Light shock, continued a few seconds, not severe
	Feb 6	02:00	Lighter than earlier shock
1929	Sept 2	17:45	
	Sept 8	10:45	Very slight
1931	Apr 3	23:45	Feeble
	Apr 6	00:07	Feeble
	May 29	02:43	
1932	Sept 22	12:50	Weak
	Sept 22	23:48	IV
	Sept 23	03:45	Weak
1952	Sept 25	20:35	IV. Buildings creaked, loose objects swayed, light fixtures rattled. (3.2)
1958	Jan 31	23:08	IV. (3.4)
1959	Dec 15	18:28	(4.1)
1962	Feb 28	05:40	Iv. Maximum, also Kenwood, Santa Rosa
1989	Oct 17	17:04	Light shock, continued a few seconds, not severe (1)

Source: Napa County General Plan, 1983

Note: (1) Reference Richard Spitler, Planning and Public Works Director, City of Calistoga

According to the Napa County General Plan, landslides may be the most important seismic hazard in the County. Many portions of the County are susceptible, and few structures can withstand landslides. Exhibit 23 adapted from the County General Plan estimates the risk of landslide in Calistoga as negligible to low.

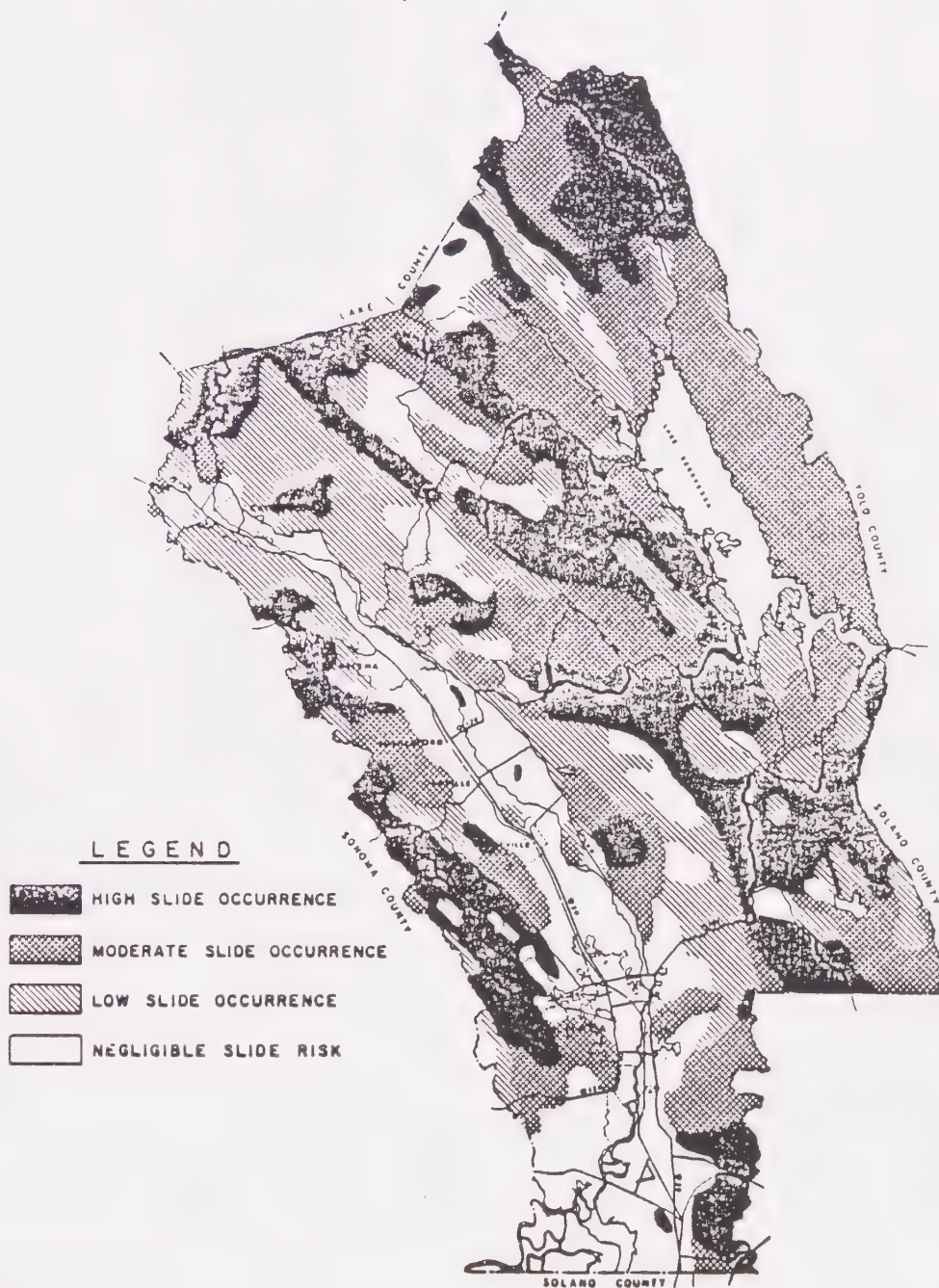
A region-wide study of slope stability indicates three types of slope-stability categories for the area including and surrounding the City of Calistoga. These categories are shown on Table TT. A majority of the City is located in Category 1, Low Risk to Life and Property. Small areas near the outer northern, eastern, and western boundaries of Calistoga's Study Area are designated as Category 2, Low Risk to Life and Property, and Category 3, Moderate Risk to Life and Property. The categories are a general indicator of slope stability. More detailed data on local conditions is necessary for use in land use planning decisions. (Nilsen and Wright and others 1979) Policies regarding site-specific geologic investigations are provided in General Plan Update Volume II: Policy and Program Document.

Liquefaction is a common mechanism causing many types of ground failure. It occurs when the strength of saturated, loose, granular materials (silt, sand, or gravel) is dramatically reduced, such as may occur during an earthquake. The earthquake-induced deformation transforms a stable granular material into a fluidlike state in which the solid particles are virtually in suspension, similar to quicksand (U.S. Geological Survey 1974).

The County of Napa General Plan has identified a large portion of the Napa Valley including Calistoga to be at risk for liquefaction. Please refer to Exhibit 24. Further study is needed to determine the location and extent of sand deposits in Napa County that are susceptible to liquefaction. It would be a fair assumption that only the Quaternary alluvial deposits, such as locations along the Napa River, would be suspected. While no record of liquefaction has been found, there is reason to believe that the problem exists due to the alluvial nature of valley sediments (Napa County General Plan 1983).

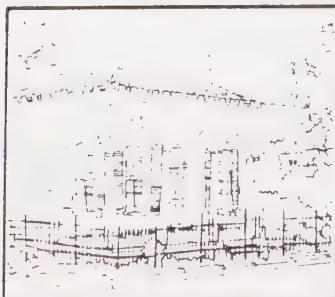
Land Subsidence

Because of the depth and conformation of alluvium in Napa Valley, land subsidence in Napa County is likely to be restricted to instant compaction of sands (liquefaction). Subsidence may also occur with the long-term compaction and plastic flow of thick, water-saturated mud in the marshlands. The southern portion of Napa County historically marshland and tide flats. This area would be most suspect in terms of possible subsidence (Napa County General Plan 1983).



NOTE: Map Generalized — Not Suitable For Evaluating
Landslide Hazards On A Parcel Specific Basis;
For The More Detailed Information Needed To Do
This See Napa County Environmental Sensitivity Maps.

Source: Napa County General Plan



LANDSLIDES IN NAPA COUNTY

MASTER ENVIRONMENTAL ASSESSMENT City of Calistoga

STA inc.

no scale

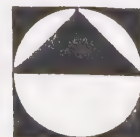


Exhibit 23

TABLE TT
RELATIVE SLOPE STABILITY CATEGORIES

<u>Category</u>	<u>Slope (Percent)</u>	<u>Stability</u>	<u>Risk to Life & Property</u>	<u>Comments</u>
<u>1</u>	<u>0-5</u>	<u>Generally Stable</u>	<u>Low</u>	<u>1. Locally bedrock may be unstable and therefore susceptible to landsliding.</u> <u>2. Limited areas along creeks, rivers, coastal cliffs, and edges of terraces have steeper slopes than those generally found in this category. Riverbanks may be particularly hazardous during periods of flooding.</u> <u>3. Some deposits (alluvial terrace, alluvial fan) may be locally susceptible to flooding and debris flows from surrounding uplands during periods of intense rainfall.</u>
<u>2</u>	<u>5-15</u>	<u>Relatively Stable</u>	<u>Low</u>	<u>1. Some areas may be underlain by bedrock types that are locally unstable and therefore susceptible to landsliding.</u> <u>2. Limited areas along creeks, rivers, or coastal margins have steeper slopes and may be susceptible to landsliding.</u>
<u>3</u>	<u>>15 (some as steep as 90 degrees)</u>	<u>Reasonable Stable</u>	<u>Moderate</u>	<u>1. Small areas are locally unstable owing to various reasons including:</u> <u>a. Failure of areas above or below that are underlain by bedrock types susceptible to landsliding or by landslide deposits;</u> <u>b. Proximity to areas of active erosion along creeks, rivers, and coastal areas;</u> <u>c. Saturated slopes adjacent to lakes and reservoirs;</u> <u>d. Proximity to active landslides that may be enlarging;</u> <u>e. Activities such as logging, cutting, and filling, construction and adding moisture to slopes.</u> <u>2. This category may include small landslide deposits not large enough to be shown.</u>

Source: Nilsen and Wright 1979

Tsunamis/Seiche

A Tsunami is a large seawave generated by earthquakes. These waves travel across the ocean at hundreds of miles an hour and are capable of causing waves cresting tens of feet high. Since Napa County has no ocean frontage, the risk of a tsunami is low. A tsunami at the Golden Gate with a run up of twenty feet, would be negligible by the time it reached Napa County. A tsunami of that scale is likely to occur once in every 200 years. (Napa County General Plan 1983)

A seiche is an abnormally high fluctuation in the water level of a bay or lake which can be compared to the back-and-forth sloshing of water in a tub. Seiches can be caused by winds, changes in atmospheric pressure, underwater earthquakes, or landslides into the water. Seiches caused by winds or atmospheric pressure changes may measure in inches whereas seiches caused by underwater earthquakes or landslides into the water have caused runups as high as 800 feet (vertical) above the normal water level. Such extreme cases are rare (Napa County General Plan 1983).

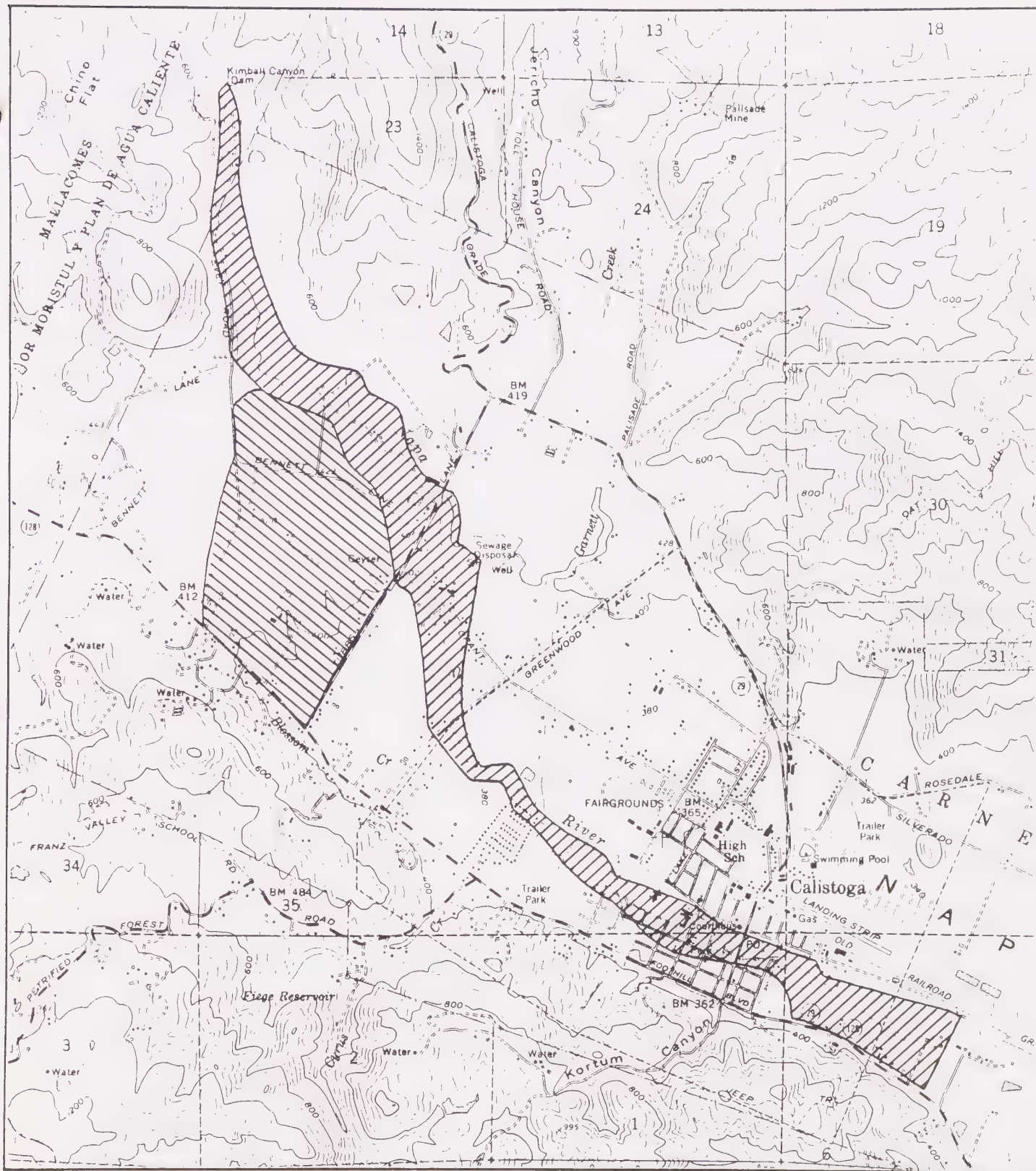
Hazards from seiches can roughly be estimated for river and reservoir shorelines through examination of historic records. Potential areas of catastrophic inundation from dam and reservoir failure or from landslide - generated waves that overtop dam crests can be mapped for all large bodies of water perched above populated areas (U.S. Geological Survey 1974). This inundation analysis has been performed for the Kimball Dam.

A map was prepared in 1982 to illustrate the effects of the failure of Kimball Dam. The map is shown in Exhibit 25. This map was prepared by Francis Smigle, City Engineer. Water from the overflow pond would extend south to Tubbs Lane. The Napa Riverflow boundaries would increase substantially as it reached the southern portion of the City.

Unreinforced Masonry Buildings

In 1986 a bill (S.B. 547 [Alquist]) was passed in the State Legislature requiring that all types of Unreinforced Masonry buildings be inspected. This bill has since been codified (Government Code Sec. 8875 et seq.). All local jurisdictions within Zone 4 of the Seismic Safety Zone which generally includes most of the coastal areas westward to the Central Valley must comply. Calistoga is located within this zone.

Specifically the law requires that any potentially hazardous URM buildings be identified. These buildings are especially vulnerable to damage caused by earthquakes and associated groundshaking and liquefaction. Next a mitigation program must be developed to reduce the hazards. Last, the jurisdiction is required to submit the information in potentially hazardous buildings and mitigation programs to the State Seismic Safety Commission by January 1, 1990.



Source: City of Calistoga

KIMBALL DAM INUNDATION MAP

MASTER
ENVIRONMENTAL ASSESSMENT
City of Calistoga



no scale



Exhibit 25

Several types of buildings are exempt from inspection under the law. These include warehouses and similar buildings with few occupants, unless used for emergency services or supplies, residential buildings with five or fewer living units, and buildings owned by the federal or state government.

Historic buildings are exempt from the identification stage. The Seismic Safety Commission believes that historic buildings should be included in the mitigation programs. Historic property includes "objects, buildings, structures, monuments, or collections thereof on existing national, state or local historic registers or official inventories such as the National Register of Historic Places and State Historical Landmarks" (California Health and Safety Code Section 37602).

In general, buildings at risk of seismic damage are likely to be public buildings located within the identified historic areas of the City (Richard Spitler, Planning Director November 7, 1989). Calistoga's Historic resources and zones of analysis are reported in the Napa County Historic Resources Inventory, Calistoga and Yountville Volume 1978. This information is included in the Cultural Resources Section of this MEA.

HYDROLOGY/FLOODING

The Napa Valley watershed is drained by the Napa River and its tributaries. As the Napa River descends into the valley, it incises older alluvial and fluvial deposits, forming a relief from stream base to surface grade from five to about 25 feet. Annual peak flow in the Napa River ranges from 670 cubic feet per second (cfs) to 12,600 cfs for 29 years of record (California Energy Commission, October 1986).

The 39-mile length of the Napa River flood plain extends from San Pablo Bay to its headwaters just north of Calistoga. The river, which flows in a southeasterly direction, slopes approximately 18 feet per mile near Calistoga. (U.S. Department of Housing and Urban Development 1979).

The principal information on flooding in Calistoga is provided in a 1979 Flood Insurance Study prepared by the U.S. Department of Housing and Urban Development, Federal Insurance Administration. The purpose of the study was to "investigate the existence and severity of flood hazards ... and to aid in the administration of the National Flood Insurance Act of 1973." In addition, the study was intended to be used by local and regional planners to "promote sound land use and flood plain development."

Frequent flooding occurs in Napa Valley due to heavy rainfall, which occurs predominantly from December through February. This results in major damage to urban areas and farmlands. As of 1977, nineteen damaging floods had been recorded since 1862. At the time of the study, the highest flood record, a 10-year event, was experienced in 1940 at St.

Helena. There are no known records of the Napa River flooding within the corporate limits of Calistoga (U.S. Department of Housing and Urban Development, 1979).

Flood events of a magnitude which are expected to be equalled or exceeded once on the average during and 10-, 50-, 100-, and 500-year period (recurrence interval) have been selected as having special significance for flood plain management and for flood insurance premium rates. These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10, 2, 1 and .2 percent chance respectively, of being equalled or exceeded during any year.

Although the recurrence interval represents the long term average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered.

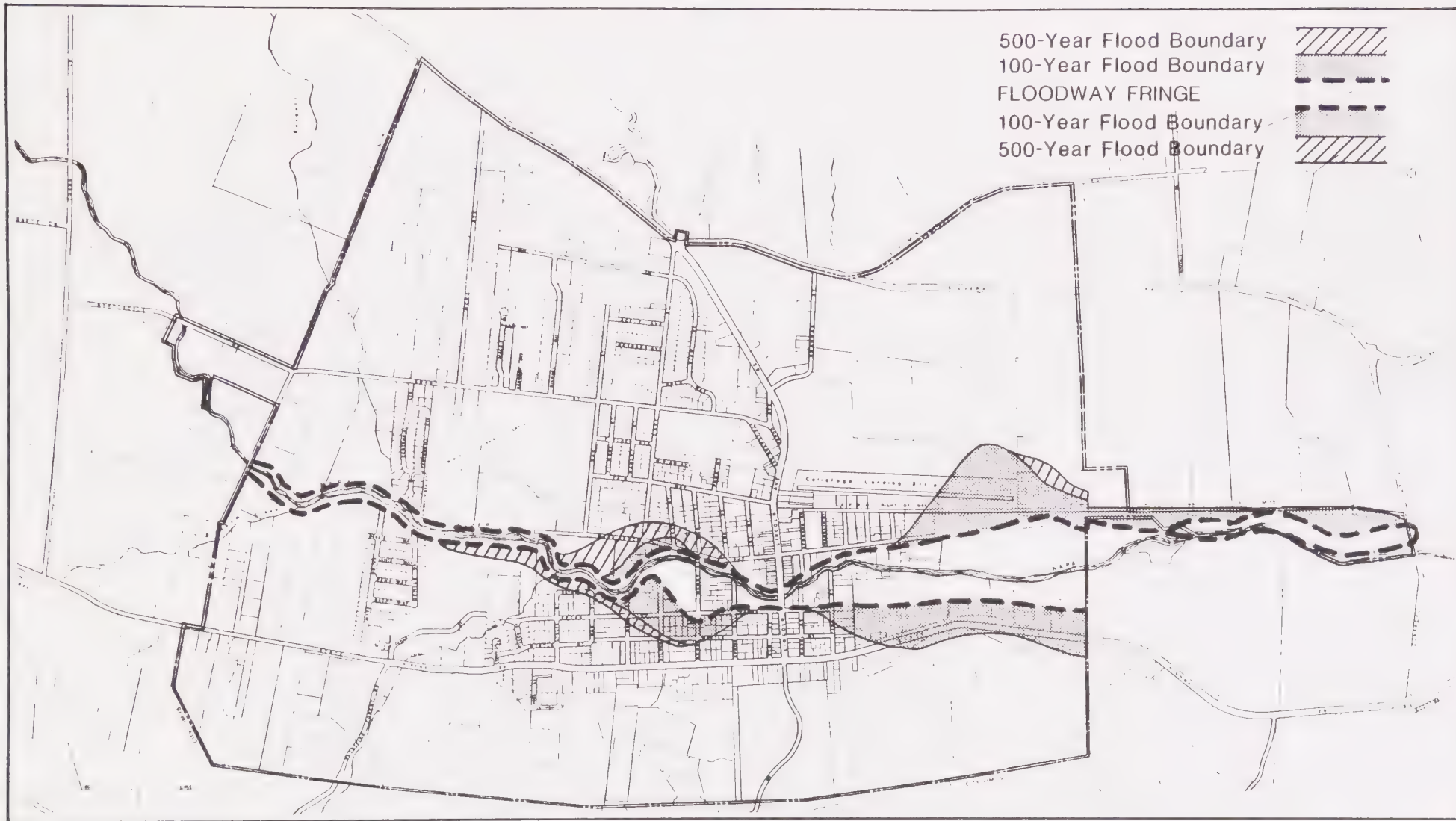
Hydrologic analyses were carried out to establish the peak discharge-frequency relationships for floods of the selected recurrence intervals for each stream studied in detail in the community. Water bodies studied included the Napa River, Cyrus Creek, Blossom Creek, and Garnett Creek. For the three creeks, analyses showed that the floods having recurrence intervals of 10, 100, and 500 years are contained in their natural channels. No flood boundaries were prepared for the creeks.

A floodway for the Napa River was developed based on the occurrence of a 100-year flood. The floodway map is presented as Exhibit 26. This map was developed from aerial photographs. To accurately assess land elevations, the floodway map should be revised.

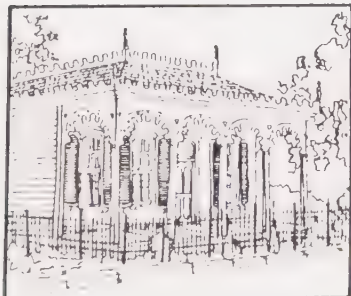
Encroachment on floodplains, such as artificial fill, reduces the flood-carrying capacity and increases flood heights, thus increasing flood hazards in areas beyond the encroachment itself. Flood plain management involves balancing the economic gain from flood plain development against the resulting increase in flood hazard.

HAZARDOUS WASTE

In March 1988, The County of Napa prepared a Draft Hazardous Waste Management Plan. The purpose of the Plan is to support county and regional planning providing for the proper reduction, recycling, storage, transfer, and disposal of hazardous waste within its boundaries. 95 percent of the waste stream in Napa County is generated by small-quantity generators and households. The major waste group in the waste stream is waste oil. The eight generalized treatment methods for hazardous waste include aqueous treatment for organics, aqueous treatment for metals/neutralization, incineration, solvent recovery, oil recovery, other recycling, stabilization, and residuals disposal.



Source: US Department of Housing & Urban Development



FLOODWAY MAP **MASTER ENVIRONMENTAL ASSESSMENT** **City of Calistoga**

STA inc.



no scale

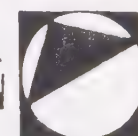


Exhibit 26

The State Office of Permit Assistance provides a copy of Hazardous Waste and/or substance sites list to each jurisdiction. As of June 1989, three sites were identified within the Calistoga area. These sites are as follows:

- ~~Department of Transportation~~
~~1413 Tubbs Lane~~
~~Problem: Tank Leak~~
- Chevron
1107 Foothill Boulevard
Problem: Tank Leak
Material: Gasoline
- Calistoga Mineral Water
504 Washington Street
Problem: ~~Tank Leak~~ Spill
Material: Diesel

Each of these sites has been investigated by the Water Resources Control Board. Unless sites have been investigated by the Department of Health Services, water wells investigated do not contain any contaminants in excess of their state action levels. In the June report none of the three sites were investigated by the Department of Health Services (Correspondence, Robert P. Martinez to City Planning Director, June 1989).

In addition, the City has identified another contamination site:

- City Hall Parking Lot
1232 Washington Street
Problem: ~~Gasoline Leak~~ Probable Tank Leak
Material: Petroleum Hydrocarbons

Well-test monitoring has been conducted for this contamination source. Some gas products were found in the soil. The soil will be excavated and aerated. No contaminants in excess of state action levels have been found in the monitored wells (Richard Spitler, Planning and Public Works Director, November 21, 1989).

In addition to the sites listed above, the County of Napa, Department of Environmental Management has identified the following contaminated sites in the City limits:

Merchant Property
1506 Lincoln Ave
Problem: Tank Leaks
Material: Aviation Fuel

Calistoga Auto Body
120B Foothill Blvd.
Problem: Unknown
Material: Unknown

Bohan's Shell
1108 Lincoln Ave.
Problem: Tank Leak
Material: Waste Oil

Food and Liquor Store #168
940 Petrified Forest Rd.
Problem: Tank Leak
Material: Gasoline

Calistoga High School
1608 Lake Street
Problem: Tank Leak
Material: Gasoline

Calistoga Soaring Center
1546 Lincoln Ave.
Problem: Tank Leak
Material: Aviation Fuel

Due to the relatively small size of Napa County's existing and projected hazardous waste stream, the most feasible facilities for the County would be storage and transfer facilities. Currently no off-site treatment, storage and disposal (TSD) facilities existing within Napa County other than waste oil storage facilities located at the American Canyon Landfill, Cloverfolt Landfill, and Napa Garbage Recycling Center.

Emergency response for hazardous material/waste incidents within the County is under the guidance of the Office of Emergency Services which is staffed by the California Department of Forestry. Napa County is one of the first counties in California to organize and train a hazardous material emergency response team.

Weaknesses of the current County program include: lack of final approval and implementation of the Napa County Hazardous Materials Emergency Response Plan, lack of a Countywide hazardous material storage ordinance, limited trained rural firefighter and law enforcement personnel, lack of appropriate equipment and training on how to use it,

the need to clarify the roles of participants, and the need to develop standby status for County personnel expected to respond to emergency response calls (Napa County Hazardous Waste Management Plan 1988).

FINDINGS

1. The City of Calistoga with the exception of the western portion of the City is classified as an area of low fire hazard risk. The western portion of the City is classified as an area of moderate fire hazard risk.
2. There have been no problems with wildland fires in the last four years.
3. There are several active faults in the Bay Area region and locally in Napa and Sonoma County which may affect the City of Calistoga should an earthquake occur.
4. Generally, the risk of landslides in Calistoga is estimated to be negligible to low.
5. The City of Calistoga is at risk for liquefaction. Further study is needed to determine the location and extend of sand deposits in Napa County that are susceptible to liquefaction.
6. Encroachment on floodplains increases flood hazards. There is a need for a flood map that accurately reflects land elevations. There is community support for the preparation of this floodway map.
7. ~~Three~~ Nine sites within the City limits have been identified on the State Hazardous Waste and/or Substance Sites List or the County of Napa Department of Environmental Management List. ~~No water wells investigated for contamination contain any contaminants in excess of their state action levels. One hazardous waste contamination site has been identified by the City. Well monitoring has been conducted. No contaminants in excess of state action levels have been found in the monitoring wells. Several wells have been investigated for any contaminants in excess of state action levels.~~
8. Numerous public buildings in the City's historical area would be subject to unreinforced masonry laws.

the need to shift the focus of research and the development of new technologies. The Commission is committed to the development of new technologies and the promotion of research and development in the field of information technology.

1992-1993

The Commission has been very active in the field of information technology. It has been working to develop a strategy for the development of information technology in the field of information technology. It has been working to develop a strategy for the development of information technology in the field of information technology.

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U.C. BERKELEY LIBRARIES



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